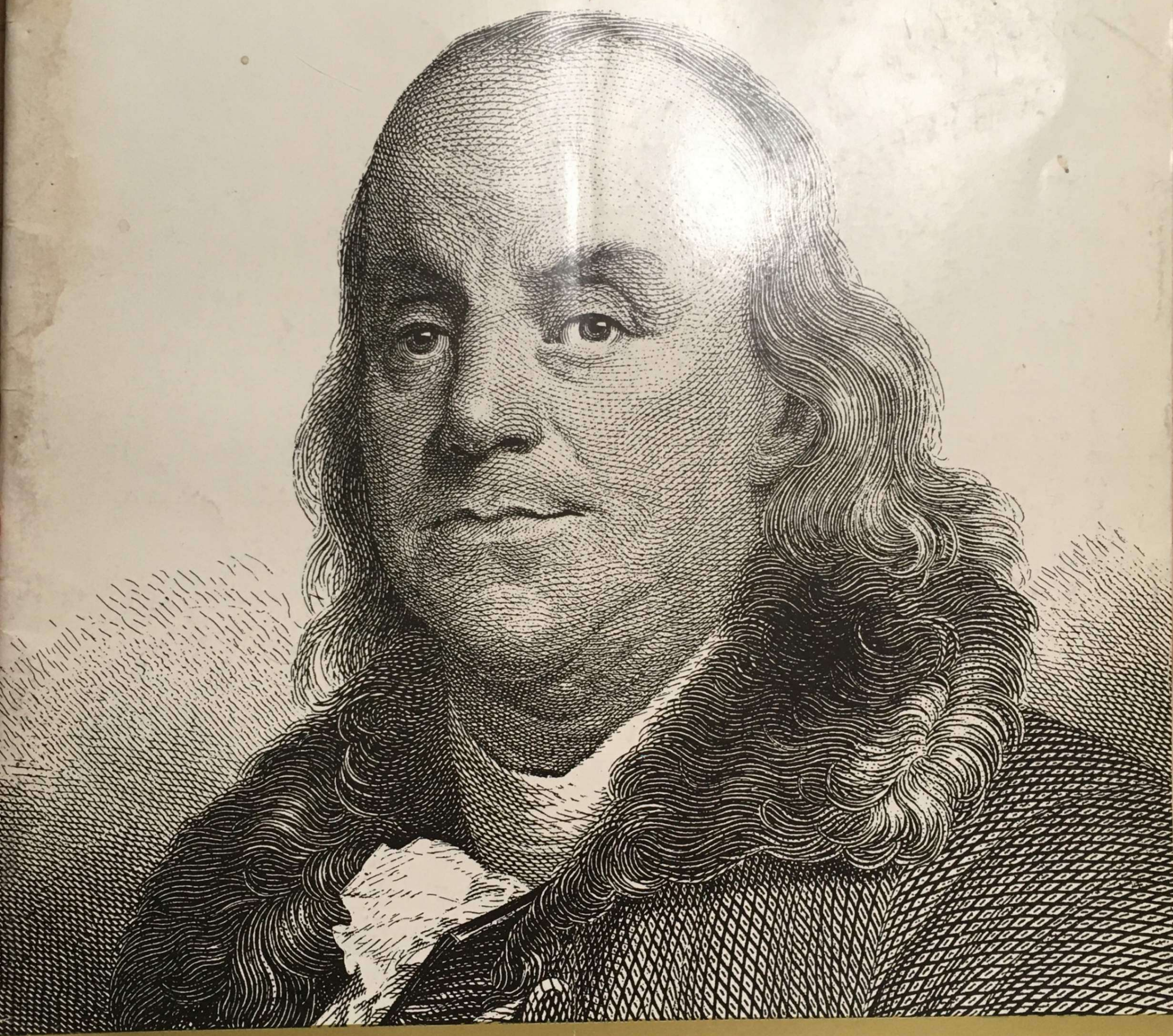
WISDOM

THE MAGAZINE OF KNOWLEDGE AND EXPERIENCE



BENJAMIN FRANKLIN

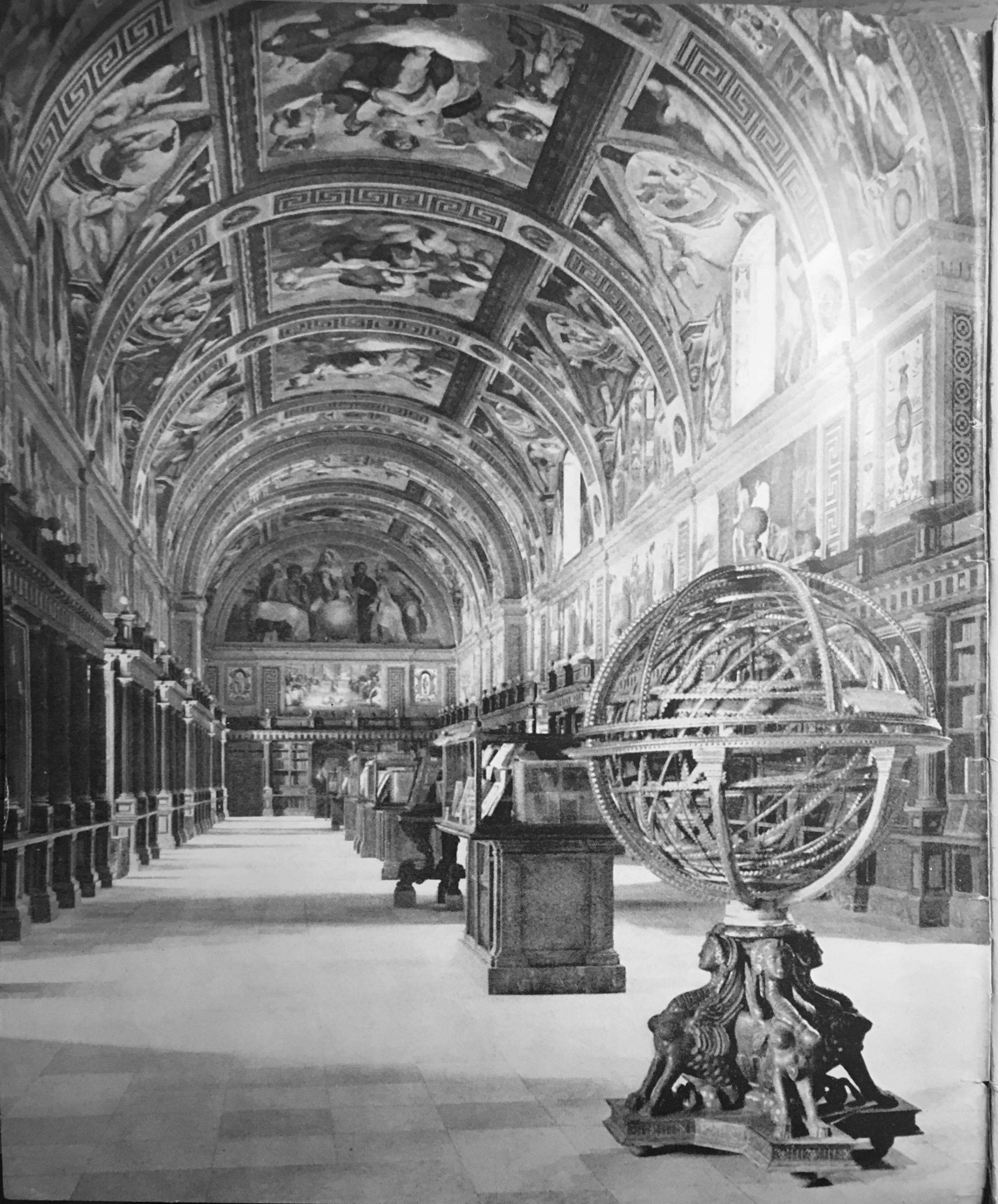
IN THIS ISSUE

The Remarkable BENJAMIN FRANKLIN

and other timeless articles magnificently illustrated

TWENTY-THIRD ISSUE

TWO DOLLARS



WISDOM

THE MAGAZINE OF KNOWLEDGE AND EDUCATION

LEON GUTTERMAN, EDITOR AND PUBLISHER

IN THIS ISSUE:

THE REMARKABLE BENJAMIN FRANKLIN

THE THIRTEEN VIRTUES

VERY HUMAN PHILOSOPHER

MEET DR. FRANKLIN

THE FRANKLIN CHRONOLOGY

HIS OUTSTANDING ACHIEVEMENTS

THE FIRST MR. AMERICAN

ART OF HAVING PLEASANT DREAMS

LAST WILL AND TESTAMENT

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FROM THE WISDOM OF BENJAMIN FRANKLIN

MASTER OF ARTS . . . . . *Alec Stern*

THE POWER OF LAUGHTER . . . . . *Sean O'Casey*

PSYCHOLOGY OF LEADERSHIP . . . . . *Harold W. Dodds*

UNDERSTANDING ALLERGY . . . . . *Harry Swartz*

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The Franklin Institute, The American Philosophical Society, and The University of Pennsylvania.

THE LATE DR. CARL VAN DOREN holds an honored place in American literature. He is the author of many books, an editor, and a Pulitzer prizewinner. *Meet Dr. Franklin* is taken from a Franklin anthology of the same name, © 1943 by The Franklin Institute, Philadelphia.

HAROLD W. DODDS is a former President of Princeton University. *The Psychology of Leadership* is from an address delivered by him at Princeton University.

SEAN O'CASEY is the Irish playwright who has a close association with The Abbey Theatre, Dublin, where many of his works have been produced. *The Power of Laughter* is from his book *The Green Crow* © 1956 by the author, and published by George Braziller Inc.

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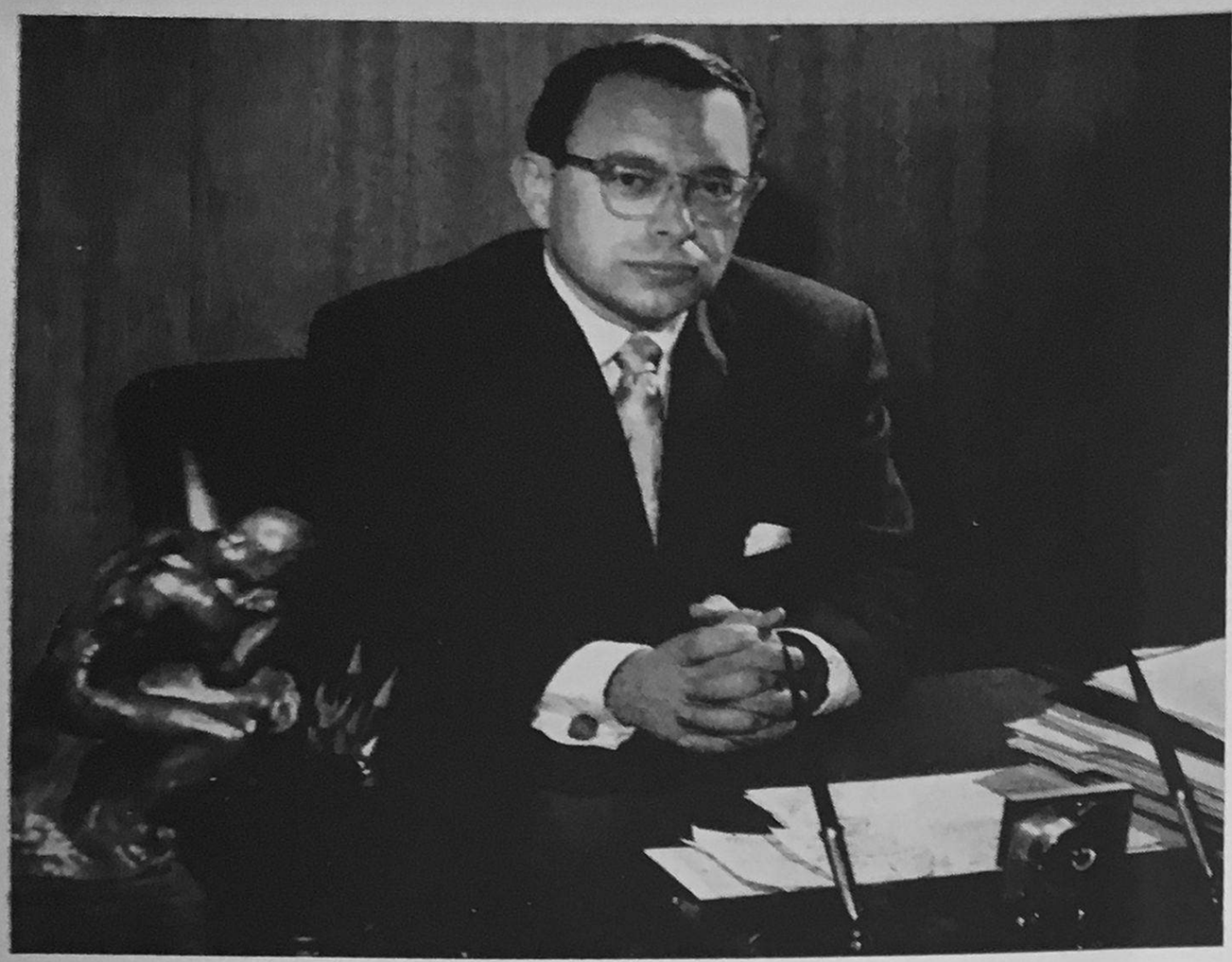


LEON GUTTERMAN, EDITOR AND PUBLISHER

"Nothing is of more importance for the public welfare, than to form and train up youth in wisdom and virtue. Wise and good men are, in my opinion, the strength of a State far more than riches or arms."

BENJAMIN FRANKLIN

A LETTER FROM THE PUBLISHER

THERE IS NO SUBSTITUTE FOR EDUCATION. There is no substitute for wisdom. Each generation owes it to itself and to its posterity to protect its culture, to enrich it, and to transmit it. The institution that mankind has worked out for that purpose is the institution known as education.

The aim of education is wisdom, and each one of us must have the chance to become as wise as he can. The purpose of education is not the accumulation of information but the development of mental ability. The highest development of the human mind and soul are the ends of human life. What we need today are more educated men and women. Learning does not stop as long as a man lives, unless his learning power atrophies because he does not use it. Educated people seek truth, but truth is never easy to find, never wholly revealed, seldom fully understood, but always to be sought. Truth wears no label and the seeker has no guarantee of success. Life is an unending adventure in this search and education a training and a preparation for it—the supreme means of ennobling and enriching the resources of the human mind and heart.

Amid all the confusion in the world today, a light has been growing steadily brighter for those who have eyes to see and a heart to understand—WISDOM MAGAZINE. Created and designed to meet the continuing educational needs and interests of mature men and women, WISDOM has been acclaimed as the most important single adult education development in the last 25 years. WISDOM has come of age in the greatest age of human opportunity. It has emerged as the one fine magazine most wanted by the intelligent people of America, for it raises the human mind to its highest possible intellectual, moral, and spiritual level.

In spite of the prophets of doom who are always with us, WISDOM has found a light for its feet through darkness and storm—an audience of intelligent readers which has supported the high educational objectives from its very first issue and encouraged its Editors in many ways in order to help further its development and accomplishments. Such is the nature of the loyalty, devotion and support of our readers, for no other magazine in existence can compare with WISDOM—or its reading audience.

Founded to serve humanity and recognizing the value of education, WISDOM MAGAZINE symbolizes the highest ideals and aspirations of man. In every respect, WISDOM is planned to provide the greatest amount of valuable knowledge to the greatest number of readers. WISDOM takes education away from the scholars, professors, and school teachers and opens the gates of learning to every man and woman. It appeals to all independent minds who are striving for a liberal education. It attracts people who seek intellectual wealth and satisfies their hunger for knowledge.

Education is a lifelong process. Schooling is only a preparation. Because we are living in an education-conscious age, WISDOM provides its readers with an indispensable educational tool. People are never too old to learn, and wisdom is essential to the intellectual life. In WISDOM MAGAZINE all knowledge is spread before the reader; here, you are invited to sit at the feast and enjoy the great ideas of civilization that can enrich the mind and the heart.

The time is short, and education is long. Since education is long, and since it is indispensable, we must do everything we can to continue it so that we may learn to develop our highest powers and live constructively and worthily. A reader wrote us: "WISDOM should be read by all adults all their lives because only through wisdom can we come within reach of life at its most rewarding levels."

Liberal education ends only with life itself. Wisdom never ends.

Leon Gutterman

EDITOR AND PUBLISHER

THE 13 VIRTUES

The following list of thirteen virtues, with their precepts which expressed the meaning he gave to them, Franklin placed on separate pages in a little book which he carried with him for more than fifty years. Each day he graded himself upon these virtues, concentrating his attention for a week at the time upon a single virtue. The form of one page is also given; the virtue named at the top of the page is the one upon which he concentrated his attention for the week. Franklin's conception of what he accomplished by the use of this scheme is told in a quotation from his autobiography: "It may be well my posterity should be informed that to this little artifice, with the blessing of God, their ancestor owes the constant felicity of his life down to his seventy-ninth year, in which this is written. Whatever reverses may attend the remainder is in the hand of Providence; but if they arrive, the reflection on past happiness enjoyed ought to help his bearing them with more resignation."

1 TEMPERANCE . . Eat not to dullness; drink not to elevation.

2 SILENCE . . . . . Speak not but what may benefit others or yourself; avoid trifling conversation.

3 ORDER . . . . . Let all your things have their places; let each part of your business have its time.

4 RESOLUTION . . . Resolve to perform what you ought; perform without fail what you resolve.

5 FRUGALITY . . . . Make no expense but to do good to others or yourself; that is, waste nothing.

6 INDUSTRY . . . . . Lose no time; be always employed in something useful; cut off all unnecessary actions.

7 SINCERITY . . . . Use no hurtful deceit; think innocently and justly; speak accordingly.

8 JUSTICE . . . . . Wrong none by doing injuries, or omitting the benefits that are your duty.

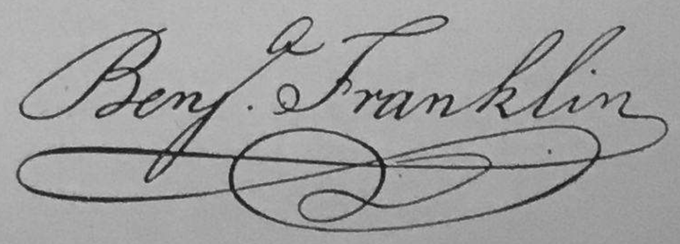
9 MODERATION . . . Avoid extremes; forbear resenting injuries so much as you think you deserve.

10 CLEANLINESS . . Tolerate no uncleanliness in body, clothes, or habitation.

11 TRANQUILITY . . Be not disturbed at trifles or at accidents common or unavoidable.

12 CHASTITY . . . . . .

13 HUMILITY . . . . Imitate Jesus and Socrates.



BENJAMIN FRANKLIN

the very human philosopher

BENJAMIN FRANKLIN WAS A GENIUS of many gifts. He was a scientist, an inventor, a printer, a writer, a patriot and diplomat. However, he did not allow all these pursuits to keep him from being a devoted family man, taking keen delight in his wife and children and grandchildren, as well as numerous nieces and nephews and cousins. There was never anything the least remote or solitary about him; he always loved company, both masculine and feminine. He had an extraordinary gift for friendship, and, up to the end of his life, was never too busy to write scores of letters to his men and women friends, old and young, famous and not-so-famous.

Franklin was not a conventionally handsome man, nor a glib talker, but he was always fascinating to women of all ages. One reason was that he was practically the only man of his day to treat women as if they had any intelligence. As one of his biographers observes, "Always a person himself, Franklin treated every woman as if she were a person, too, and made her feel more truly one than ever. Because he loved, valued, and studied women, they were no mystery to him, and he had no instinctive fear of them. Statesman and scientist, profoundly masculine, he took women into account as well as any other force of nature."

Franklin's career as a patriot and diplomat is familiar. Franklin as a friend and family man is less well known—yet, it is important to become acquainted with Franklin's genius in human relationships, because home and family and friendship, mutual trust and affection, form so large a part of the truly democratic way of life. There has never been any other notable figure in American history whose human relationships were so warm, so interesting, so varied.

Franklin was one of fifteen children. His father was a tallow-chandler, his mother a typical hardworking housewife in a house that was small and inconvenient. In his autobiography, Franklin tells little of his early years except to say that, when he was seven years old, all his family tried to keep him from making so much noise around the house with a penny whistle.

Even after Franklin became world famous, he never lost touch with that large bustling household. He sent his brothers and sisters money; he took nieces and nephews into his own home and saw to their education; he always took the time to write long letters to his mother, letters about the things she would like to hear, his simple everyday life, rather than his political or scientific activities. Once he wrote to her, "I would rather have it said of me, 'He was useful,' than, 'He died rich.' " And she, the mother of a man whom the world delighted to honor, sent him a few loving misspelled letters in return.

Franklin had very little formal education, two years, in fact. He learned wherever and whatever he could, and he, the future scientist, failed in arithmetic. But he was the sort of boy who would have educated himself in a desert, because he had curiosity and boundless energy and soaring ambition. One of his ambitions was to improve his character. In his early teens, he drew up a very solemn and earnest list of the virtues he wished to practice: Temperance, silence, order, resolution, frugality, industry, sincerity, justice, moderation, cleanliness, tranquility, chastity, and humility.

This imposing program does not seem to have daunted him. He kept a little account book where he recorded his successes and failures with the virtues, and he did not try to practice them all at once, but practiced each one separately for a week. Since he wanted thirteen virtues, and there were fifty-two weeks in a year, he hoped to practice each virtue four times a year! He seems to have found humility easiest, and in his own words, orderliness, the hardest. We know that he practiced frugality, because he became a vegetarian and teetotaler, in order to save money. He was always cleanly. Long afterward, when he was Ambassador to France, the French newspapers commented often on the special whiteness of his linen.

In spite of all these virtues, Franklin was no prig. He liked a good time as much as any boy, and became an expert swimmer. He even learned to swim and fly a kite at the same time, being drawn along the surface of the water by the power of the kite. He fell in and out of love, like any other adolescent, and, to his family's horror, ran away to Philadelphia. When he landed in that city, having rowed part of the way, he was tired and dirty and the pockets of his homespun suit were stuffed out with shirts and stockings. His first thought was food. He bought three loaves of bread and walked down the street, a loaf under each arm, eating the third loaf. That was when his future wife, Deborah Read, saw him first, as she stood in the doorway of her father's house and laughed heartily at the spectacle he made. She was a handsome healthy high-colored girl, and young Benjamin Franklin must not have been discouraged by her laughter, because he took lodgings with her family and set about the business of courting his Deborah. However, her family thought the lovers were far too young and the lovers parted with many vows to be faithful forever.

The disappointed suitor took a boat for England where he became apprentice in a London printing shop. He wrote Deborah only one letter all the while he was away, a mistake he was to regret bitterly. Deborah, thinking he had forgotten her, married a ne'er-do-well, with whom she was never happy, and from whom she parted as soon as she discovered he had another wife living. On his return from London, Franklin found Deborah remorseful and despondent. Franklin said it was all his fault for having left her, and what did the past matter, since they still loved each other. They were married.

Franklin had always believed in marriage, and, all his life, advocated young marriages. Often he said that reasonable friendship, rather than blind emotion, should be the basis for marriage. His and Deborah's marriage had friendship and emotion, too. As

Franklin said, "We throve together and have ever mutually endeavored to make each other happy." He set up a little shop in part of his house, in connection with his printing shop, where Deborah sold books and stationery and his mother-in-law sold salves and ointments she had made. Their first customer was a farmer who, to their intense delight, bought five shillings worth. There, in a room over the shop, Franklin's son, Francis, was born, who died of smallpox at the age of four. Long afterward, Franklin wrote to his sister . . . "though it is thirty-six years since Franky died, I cannot think of him without a sigh."

Franklin had many fixed ideas about the duties of wife and husband. When his sister married, he wrote: "I had almost determined on a tea table for your wedding present, but when I considered that the character of a good housewife was far preferable to that of being only a pretty gentlewoman, I concluded to send you a spinning wheel. . . ."

Franklin believed, too, that women should be neat and attractive about the house. Said he, "Let us survey the morning dress of some women. Downstairs they come, pulling up their ungartered dirty stockings; slipshod, with naked heels peeping out; no stays or other decent conveniency, but all flip-flop . . . the frowsy hair hanging in sweaty ringlets . . . hands unwashed, teeth furred. . . ."

The young husband set forth many of his ideas about marriage in *Poor Richard's Almanack*, which sold widely all over the colonies for twenty-five years, a new issue coming out each year. The first *almanack* starts with the words, "The plain truth of the matter is, I am excessive poor, and my wife, a good woman, is, I tell her, excessive proud; she cannot bear, she says, to sit spinning in her shift of tow while I do nothing but gaze at the stars." Next year he reports, "My wife has been enabled to get a pot of her own . . . nor have we ever been since without something of our own to put in it. She has also got a pair of shoes, two new shifts, and a new warm petticoat."

Shortly before Deborah died, in her seventies, Franklin wrote her: "It seems but the other day since you and I were ranked amongst the boys and girls, so swiftly does time fly. We have, however, great reason to be thankful that so much of our lives has passed so happily."

Franklin, much more than most husbands of his day, was anxious to make his wife's domestic work as easy as possible. When the chimney smoked, he undertook scientific investigations into the matter of smoking chimneys, which led to great improvement in their construction. Even when he was away in London on a diplomatic mission, he wrote Deborah minute suggestions as to the installation of a new oven.

He invented, for better household heating, the *Franklin Stove*, which he called the *Pennsylvania Fireplace*. When he put it on the market, he cleverly addressed his advertising to women. He said that, on account of imperfect heating systems, women got "*colds in the head, rheums, and defluxions, which fall into their jaws and gums, and have destroyed many a fine set of teeth in these northern colonies. Great and bright fires do very much contribute to damage the eyes, dry and shrivel the skin, and bring on early the appearance of old age.*" Naturally his stove sold very well indeed. To make his home safe from lightning, Franklin invented the lightning rod, which led to all his further experiments with electricity.

Franklin always paid a great deal of attention to dress, both his own and women's. He was far from being a fop, but he was always appropriately dressed. In France, for instance, he at first wore a coonskin cap, because he knew the French liked to think of him as a man out of the wilderness. When he appeared at the French Court after the treaty of aid and friendship between France and the United States, he wore no wig or sword, but simple brown velvet, white hose, his hair hanging loose, and a white hat under his arm. "He was much the most conspicuous among the envoys," a spectator said.

Women's clothes always interested him and he often wrote in his letters detailed descriptions of what the fine ladies of London and Paris were wearing. He told one of his young woman friends, "As to rouge, the French women don't pretend to imitate nature in laying it on. There is no diminution of the colour to the faint tint near the sides, nor does it show differently in different faces."

Though Franklin was affectionately devoted to Deborah all her life, he had numerous friendships with women, and, the older he became, the more fascinating to women he was. When he was Ambassador to France in his seventies, his picture was on thousands of miniatures, medallions, statuettes, rings, watches, vases, handkerchiefs and dishes, all eagerly purchased by the fair sex. Past seventy, after Deborah's death, he proposed marriage to a French lady who turned him down, but her refusal did not disturb their friendship. Years later he wrote her, "Often in my dreams I have breakfast with you, I sit beside you on one of your hundred sofas, I walk with you in your beautiful garden."

His friendship with Catherine Ray, which lasted all their lives, was a typical instance of Franklin's charm, wit, and gallantry. He met her when he was in his fifties and she was twenty-three, a beautiful and gay young girl. He rarely saw her, but they wrote many letters. In one letter he thanks her for some cheese and says, "Mrs. Franklin was very proud that a young lady should have so much regard for her old husband as to send him such a present. We talk of you every time it comes to table."

Another time he says, "I hear you are now in Boston, gay and lovely as usual. Let me give you some fatherly advice. . . . Be a good girl and don't forget your catechism. Go constantly to meeting—or church—till you get a good husband; then stay at home and nurse the children and live like a Christian." This friendship continued, mostly by letter, for more than thirty years, while Catherine became a wife, a mother, a grandmother. At the age of eighty-three Franklin wrote her: "Among the felicities of my life I reckon your friendship, which I shall remember with pleasure as long as that life lasts."

Franklin had a gift for friendship with men, too. He could not have occupied such important diplomatic posts, in America, in England, and in France, had he not known how to handle men with consummate tact and wisdom. One of his greatest pleasures was organizing clubs for men, and, almost everywhere he went, he founded one. The most famous was the *Junto Club*, which he organized in his youth in Philadelphia. Its purpose was to discuss questions of the day, questions such as: "Have you observed lately any encroachment on the just liberties of the people?" The Club met in a tavern, and between questions, drank a mild glass of wine. Many young men have organized clubs for discussion, but Franklin is the only man to have kept such a club alive for almost half a century.

This presentation of the less familiar side of Benjamin Franklin's life cannot, in such a brief time, give more than a glimpse of him as a friend and family man. His character was so complex, his activities so multiple, that whole books could be written on any one of his interests. However, we cannot leave this glimpse of Franklin without saying that Franklin, all his life, was filled with an abiding faith in a God. Just a few weeks before his death, he wrote to the President of Yale: "You desire to know something of my religion. . . . Here is my creed: *I believe in one God, Creator of the Universe. That He governs it by his Providence. That He ought to be worshipped. That the most acceptable service we render Him is doing good to His other children. That the soul of man is immortal, and will be treated with justice in another life respecting its conduct in this.*" ◆

MEET DR. FRANKLIN

by Dr. Carl Van Doren

FRANKLIN HAD, I think, the most eminent mind that has ever existed in America. No wonder there are so many legendary misconceptions of him that it is difficult now to restore and comprehend him in the great integrity of his mind, character, and personality. He appears, somehow, to be a syndicate of men. We study him as a scientist, as a diplomat, as a statesman, as a business man, as an economist, as a printer, as a humorist and wit, as a great writer, as a sage, and as a landmark in the history of human speech about the common ways of life. What had been said before he so often said better. He was great in friendship, and in his later years was probably the most renowned private citizen on earth. It has recently been more than once remarked—and printed—that Benjamin Franklin was the American Leonardo da Vinci. This is American modesty, if not colonialism. Why not occasionally say that Leonardo da Vinci was the Italian Benjamin Franklin?

Franklin was the earliest American whom, without limiting ourselves to national terms, we can call a very great man. When you try to define his particular greatness you run into what John Adams felt in his jealous days in Paris. Adams was a great man, but not a very great man. A great man such as Adams living with a very great man such as Franklin cannot tell the difference between himself and the other. Adams could not tell why people thought the difference to be so enormous. Nor can anybody express the difference better than with a fairly common, if not entirely just, geographical analogy. Imagine yourself in a range of mountains. You look up, and several of the mountains seem to you, from where you stand, as high as the master of them all. But when you get to a distance which gives perspective you see that the great mountain towers above the others, which are, in a sense, only foothills to it. This was true of many men with whom Franklin was associated during his life, who were as far from being aware of his genuine superiority as posterity has sometimes been since then. Moreover, his superiority is the hardest kind to measure. We can sometimes measure superiority when it shows itself in outward acts, achievements, tumults, benefits, or damages. Franklin's eminence was in his almost supreme mind that moved to its countless tasks with what seems perfect ease. Both the supremacy and the ease are hard for us to explain because they are so unique that comparisons fail us.

There are, of course, people who take an attitude toward Franklin that may remind us of the fate of Aristides. For his virtues, you will remember, he had a peevish vote cast against him by an illiterate man who was tired of hearing Aristides called Aristides the Just. We often have an impulse to fear and distrust great excellence. We say we like it, but in our hearts we suspect it of being more—and consequently less—than human. When we say this or that hero is *human* we always mean he is weak in some way that is comforting. All of us are weak, and we like to believe this is human of us. When we find a similar weakness in a great man we are pleased because it means that the great are not so much greater than we are after all.

It is now and then asked if Franklin did not get most or many of his ideas from other men, and then out of vanity take the credit to himself. I do not think Franklin was particularly vain. In the third paragraph of his *Autobiography* he disarmingly admitted that telling his story might gratify his vanity. "Most people dislike vanity in others, whatever share they have of it themselves; but I give it quarter wherever I meet with it, being persuaded that it is often productive of good to its possessor, and to others that are within his sphere of action; and therefore, in many cases, it would not be altogether absurd if a man were to thank God for his vanity among the other comforts of life." Franklin knew that the false modesty which men conventionally affect is a mode of self-conscious egotism.

What could Franklin do when he wrote his *Autobiography* but tell of things he had done or helped do? Why should he have talked as with his hand over his mouth or his elbow over his head? Everybody knew he was great and famous. For him to pretend not to know that would have been silly, a form of stage fright. In a letter about the classic epigram of Turgot which said Franklin had snatched the lightning from the sky and the sceptre from tyrants, Franklin in 1781 honestly protested. "It ascribes too much to me, especially in what relates to the tyrant; the Revolution having been the work of many able and brave men, wherein it is sufficient honor for me if I am allowed a small share."

Or go back to an earlier year in Franklin's life, when he was not so famous and might have been tempted not to be so generous.

In the fall of 1753 he got together what he called a "philosophical packet" of letters exchanged between him and various scientific friends of his in America. It was an important year for Franklin. The King of France had complimented the remote Philadelphia tradesman on his electrical discoveries, Harvard and Yale had given him honorary degrees, the Royal Society in November awarded him the Copley gold medal. The "philosophical packet" was to signalize what Franklin hoped would be a fresh beginning for him in the scientific career he looked forward to. Among these papers was a letter from James Bowdoin of Boston, dated November 12, in which he—before any other scientist so far as is known—hit on the first true explanation of *luminosity* (phosphorescence) in sea water: "that the said appearance might be caused by a great number of little animals, floating on the surface of the sea, which, on being disturbed, might, by expanding their fins, or otherwise moving themselves, expose such a part of their bodies as exhibits a luminous appearance, somewhat in the manner of a glowworm, or firefly."

Here was a subject Franklin had already speculated on. He had at first conjectured that this luminosity was "owing to electric fire, produced by friction between the particles of water and those of salt. Living far from the sea, I had then no opportunity of making experiments on the sea water, and so embraced this opinion too hastily. For in 1750 and 1751, being occasionally on the sea coast, I found, by experiments, that sea water in a bottle, though at first it would by agitation appear luminous, yet in a few hours it lost that virtue; hence, and from this . . . I first began to doubt of my former hypothesis, and to suspect that the luminous appearance in sea water must be owing to some other principles."

Bowdoin's conjecture at once struck Franklin as sounder than his own. "It is indeed very possible," he wrote in a letter dated 13 December, "that an extremely small animalcule, too small to be visible even by the best glasses, may yet give a visible light. I remember to have taken notice, in a drop of kennel water magnified by the solar microscope to the bigness of a cart-wheel, there were numbers of visible animalcules swimming about; but I was sure there were likewise some which I could not see, even with that magnifier; for the wake they made in swimming to and fro was very visible, though the body that made it was not so. Now, if I could see the wake of an invisible animalcule, I imagine I might much more easily see its light if it were of the luminous kind. For how small is the extent of a ship's wake, compared with that of the light of her lantern."

Dr. Edwin Grant Conklin of the *American Philosophical Society* recently told me that a Japanese scholar had called Franklin's comment on these animalcules in sea water the earliest guess at the existence and nature of the microorganisms, as we should now call them, which are responsible for the phenomenon. Franklin had nothing to do with the error. He kept back his own letter (to be published long after his death), and sent Bowdoin's to London, where it was read before the *Royal Society* in December 1756 and later included in the 1769 edition of Franklin's *Experiments and Observations on Electricity*, as *A Letter from J. B. Esq; in Boston, to B. F. concerning the Light in Sea-Water*. The credit was Bowdoin's, and Franklin plainly gave it to him.

This same 1769 volume, among the most fascinating in the whole range of eighteenth-century "philosophical" writings, punctiliously credited Thomas Hopkinson, Ebenezer Kinnersley, and Philip Syng with their original suggestions and discoveries made during the *Philadelphia experiments*. If the three came to be overlooked in the light of their greater colleague, it was hardly Franklin's fault. Reporting to Peter Collinson in London, Franklin constantly spoke of "our electrical enquiries" and the things "we" had found out, never pretending to have done the work alone. The first collection of his *Experiments and Observations* (1751) was possibly printed in London before Franklin in Philadelphia had known it was to be. Because he alone had written the reports, his name alone was given on the title page. In his own copy of the pamphlet he marked each experiment with the initials of the discoverer: *Hopkinson's* once, *Kinnersley's* seven times and once jointly with Franklin's, *Syng's* three times. There can be little doubt that Franklin was always chief among the experimenters, as there can be none that he was the best writer among them. But he did not make excessive claims for himself. What happened was that as he went on growing more and more famous, the world credited him with more and more achievements, past as well as present. First men are dramatically first, and the rest nowhere to speak of.

I know it is commonly said that the *Autobiography* is a retouched photograph in which Franklin emphasizes his own share in the life of his times and minimizes that of other men. I also know that I have spent many days and weeks investigating this very matter and have come to the conclusion that he left out things he had done more often than he even seemed to claim to have done things he had not. Philadelphia during the great years of the *Junto* (1727 to 1757) was a town of remarkable intellectual activity, and its history has not yet been truly written as I hope it will some day be. But no matter what claims may be made for other men, Franklin emerges as the chief among them, the energizing, galvanizing source of two-thirds of the town's important enterprises.

When I am told, as I occasionally am, that I make Franklin out as larger than life, I can only answer that Franklin must have been what he was, because nobody could have invented such a figure. Stranger things happen in fact than in fiction. Nature is richer in invention than men are. The great characters in fiction are almost always heroes who have each of them some ruling passion, with enough human weaknesses to give him a reasonable credibility Romantic creation is most likely to be exaggeration along a few lines. But the more you study Franklin the more lines you find running out from him in all directions, and the more facts that no poet—however romantic and exaggerative—would ever have thought of inventing. The wonder of Franklin is the facts that are true about him. The more exact the research into his character, the more surprising the adventure.

Too much emphasis has been laid, I think, on his simple practical ingenuities. You go into a grocer's and see the clerk taking objects down from high shelves with a device based on the *long arm* which Franklin invented to get at his books. Most of us have in our kitchens a combination chair-and-stepladder which Franklin seems to have devised; and in our fireplaces a draft such as he had made for his fireplace in Craven Street. He has been credited with the invention of the rocking chair, which I believe he did not invent, though in his last years he had one which *automatically fanned him* when he rocked. But the ingenuity that went into these gadgets is less notable than the ideas behind Franklin's principal inventions.

If, for example, we read his remarkable pamphlet about what he called the Pennsylvanian fireplace, later known as the Franklin stove, we should not be too much taken by the salesmanlike adroitness of his arguments. It is true he was adroit, particularly in his claims that the use of the stove would be beneficial to the health, complexion, and beauty of women. Such arguments were as likely to be effective in 1744 as they would be today. But Franklin believed they were sound, as they were. He had not designed his stove purely for economy in fuel. He had strongly in mind the great importance of proper ventilation, and its value for health. He even took into account an esthetic element. His stove, unlike the Dutch and German stoves of the time, allowed

people to see the fire, "which is in itself a pleasant thing." In 1744 Franklin had been using his stove, he said, for "the four winters past," which takes the invention back to 1740. But he put off writing about it till he had announced the organization of the *American Philosophical Society*. His pamphlet was in effect his first contribution to the work of this new league of scientists. As if to give his little treatise the dignity of learning, he accompanied it with notes from various impressive sources, one of them in Latin.

Certainly the lightning rod was not a gadget. The experiment which Franklin proposed, to prove whether electricity and lightning were identical, and his own separate demonstration with the kite, must be ranked with the most fundamental as well as the most striking experiments in scientific history. The story of the kite is now so old and so familiar that it has come to seem a pleasant legend, not much more real to us than the customary pictures of the scene, which show Franklin's son as a little boy when in fact he was twenty-one or so and as tall as his father. The experiment, because it solved a mystery, has so deprived lightning of its terror that it no longer overawes men. Franklin, drawing the lightning from the skies, removed it from the dread region of mythology. Kant was not speaking for picturesque effect when he said Franklin was a new Prometheus who had stolen fire from heaven. The expression meant, literally, that Franklin had made men equals of the gods and therefore free of an ancient slavish dread. Nobody in 1752 felt that the kite story was a quaint little incident. It was something immense, and it gave Franklin the reputation of a wizard, not unlike Merlin or, in our day, Einstein.

I have, I suppose, already made it clear that I do not agree with those almost unanimous modern commentators on Franklin who think of him as primarily an ingenious inventor. I will go further and say that I think his fundamental conjectures are more important than his inventions. He said of himself: "I own I have too strong a penchant to the building of hypotheses; they indulge my natural indolence." But these hypotheses were as truly original as anything he ever invented. What he called his "conjectures and suppositions" about electricity make up the *principia* of the science. Nor did he confine himself to one branch of science, or to science as a whole. His notes in 1743 on the origin of northeast storms were the first step toward a scientific meteorology. In his *Observations Concerning the Increase of Mankind, Peopling of Countries, etc.*, written in 1751, he not only anticipated Malthus, who acknowledged his debt to Franklin, but also forecast the theory of the American frontier later associated with the name of Frederick Jackson Turner. In 1754 Franklin in his famous letters to Governor Shirley of Massachusetts set down his farsighted plan for equal justice to the various parts of the British Empire, and summed up almost all the American arguments of the Revolution. In 1762 he wrote the earliest piece of scientific musical criticism, and in 1768 said as much as has been said since about the need of reform in English spelling. He was the first scholar who studied the *Gulf Stream* (1769) and had some understanding of it and the possible use of it by navigators; and among the first who insisted that the common cold is more likely to come from contagion than from exposure. As he put it in one of the notes he made in 1773 for a paper he intended to write: "Think they get by coming *out* of such hot rooms; they get them by being *in*."

Though from 1773 to 1783 Franklin was so much absorbed in politics he had little time for general ideas, he had hardly signed the final treaty of peace with England when his mind was alert with bold conjectures again. Having seen the first ascent of human passengers in a free balloon, in Paris in November 1783, Franklin at once—and apparently alone among his contemporaries—foresaw the possibility of aerial warfare. This discovery, he wrote in December, might "give a new turn to human affairs. Convincing sovereigns of the folly of wars may perhaps be one effect of it; since it will be impossible for the most potent of them to guard his dominions. Five thousand balloons, capable of raising two men each, would not cost more than five ships of the line; and where is the Prince who can afford so to cover his country with troops for its defence as that ten thousand men descending from the clouds might not in many places do an infinite deal of mischief before a force could be brought together to repel them?"

Franklin's own age knew him as philosopher and sage, statesman and wit, and while delighting in his charm and grace thought of him as always a figure of weight and dignity. It remained for another century to take affectionate familiarities with him, and call him *Ben Franklin*—which only his immediate family ever did—as the century called other heroes *Andy Jackson* and *Abe Lincoln*. The homely anecdotes of Franklin's *Autobiography* gave him a homespun reputation which does him less than justice. There was little that was shirt-sleeved in his science or politics or diplomacy. His manners, as I have written elsewhere, "were as urbane and expert as his prose." His economical maxims give a wrong impression of his character, which was generous and at times lavish. "Avarice and happiness never saw each other," he wrote as Poor Richard. "How then should they become acquainted?" So far from making a great virtue of the cunning which has been often ascribed to him, Franklin as *Poor Richard* said that "Cunning proceeds from want of capacity"—meaning that truth was better. "Dr. Franklin," Henry Laurens wrote when the British ministers were warily looking for some one to treat with Franklin for peace in 1782, "knows very well how to manage a cunning man; but when the Doctor converses or treats with a man of candor there is no man more candid than himself."

Though Franklin was an excellent and successful business man, he retired from active business at forty-two and spent forty-two years more in the service of the public. He might have made a fortune if he had patented his stove or his lightning rod. He refused to patent anything which he thought might be of benefit to mankind. As he did not hungrily gather wealth, so he did not cautiously guard his comfort or safety. It must never be forgotten that in his seventieth year Franklin might with decency have done what his more conservative son advised him to do; that is, retire from active affairs and let younger men settle the conflict between England and America. Instead Franklin, at the risk of peace and even of his neck, took his stand with the revolutionaries. Life with him began all over again at seventy. The older the bolder.

I shall take the liberty of quoting the final words of my *Benjamin Franklin*, in which I have done my best to reduce his qualities to their essence. "Franklin was not one of those men who owe their greatness merely to the opportunities of their times. In any age, in any place, Franklin would have been great. Mind and will, talent and art, strength and ease, wit and grace met in him as if nature had been lavish and happy when he was shaped. Nothing seems to have been left out except a passionate desire, as in most men of genius, to be all ruler, all soldier, all saint, all poet, all scholar, all some one gift or merit or success. Franklin's powers were from first to last in a flexible equilibrium. Even his genius could not specialize him. He moved through his world in a humorous mastery of it. Kind as he was, there was perhaps a little contempt in his lack of exigency. He could not put so high a value as some men put on the things they give their lives for. Possessions were not worth that much, nor achievements. Comfortable as Franklin's possessions and numerous as his achievements were, they were less than he was. Whoever learns about his deeds remembers longest the man who did them. And sometimes, with his marvelous range, in spite of his personal tang, he seems to have been more than any single man: a harmonious human multitude." ◆

BENJAMIN FRANKLIN AND EDUCATION

MORE THAN 200 YEARS AGO Benjamin Franklin startled the American people (and the people of other countries) by telling them their educational system was faulty, and should be revised.

He insisted that colleges should not be restricted to teaching *ornamental studies* for the wealthy; that they should be for all the people, including women. With clear logic he proved that the prevailing classical education must be broadened to include science, modern languages, and the mechanic arts if the world was to progress and benefit from scientific discoveries.

These revolutionary proposals came from a man who had received less than two years of formal schooling. Yet, within a lifetime of service devoted to the promotion of useful knowledge, he had founded two colleges and helped many others; was honored with degrees from Oxford, St. Andrews, Yale, Harvard, and William and Mary, and was elected to membership in 24 of the leading learned societies throughout the world.

He taught himself arithmetic because he needed it to pursue scientific studies. He taught himself to write by self-imposed prose exercise daily—using the *Spectator* essays as his text. He learned French, Italian and Spanish, in addition to Latin, because the new ideas of discovery were written in those languages. He adopted with enthusiasm the experimental methods the Scientific Societies were struggling to introduce into the classically-minded universities.

But Franklin was not content to improve his own mind. During his business years he organized *The Junto*, "the best school of philosophy, morality, and politics that then existed in the province." It became the club of the earnest, poor, but enterprising young men who sought a convivial fellowship that would lead to their advancement and improvement.

As a means of making more books available to members of *The Junto*, Franklin recommended pooling their books, but as this was not as effective as he had hoped, he then proposed the formation of the *Library Company of Philadelphia*, the first subscription library in America. Later, when he was in a financial situation that permitted the distribution of gifts, he made substantial contributions to many college libraries.

Franklin was so satisfied with the progress of the *Junto* that he envisaged the formation of a group of more advanced students. He proposed to bring together American men of learning; find out what they were doing; and to pool their knowledge. To achieve this end he printed a circular letter and distributed it among his correspondents. In this way he secured the cooperation of men of outstanding intelligence in founding America's foremost learned society, *The American Philosophical Society*.

The greatest of Franklin's many contributions to education was the effort to establish a college in Pennsylvania. He did not propose a course of studies similar to that offered by other established colleges. In one of his earliest writings he had lampooned the teaching in which he saw little of practical benefit to the students. Instead, he devoted much thought to the idea of a college that would be devoted to the needs of the age. The outcome was the publication of *Proposals Relating to the Education of Youth in Pennsylvania*, which he printed and distributed with his newspaper.

Franklin's *Proposals* and other writings brought practical studies, formerly taught by irregular teachers, into respectability, and placed them under a board of trustees with extensive personal responsibilities.

But they did not stop there. They pioneered the inclusion of athletics as a regular college activity. They advocated greater emphasis upon the study of English and the teaching of modern languages as being "more useful" than the exclusive study of Latin and Greek, until then accepted as essential subjects.

Franklin originated the plan of the *elective system of college studies* and the group system—both widely adopted many years later in America and in other countries.

Following his principle of striking while the iron was hot, he called personally upon those men whom he thought would be willing and able to subscribe the necessary funds to start the school. He was successful in securing the cooperation of these influential people and the *Academy and Charitable School* was opened in 1751, eventually to develop into the famed University of Pennsylvania.

Franklin was not content to see the school started. In printing the sermon preached at the opening of the *Academy* he appended to it *The Idea of the English School*, intended for the guidance of the trustees. In this he outlined a progressive course of studies to be followed through the six grades. In many cases he named the books that should be used as texts. "Thus instructed, Youth will come out of this School fitted for learning any Business, Calling, or Profession, except such wherein Languages are required; and "tho unacquainted with any ancient or foreign Tongue, they will be Masters of their own"—advice which influenced all educational thinking.

It is natural that he should have written what is, perhaps, the most thoughtful of all tributes to education, to his friend Dr. Samuel Johnson:

> "Though the culture bestowed on *many* should be successful with only a *few*, yet the influence of those few and the service in their power may be very great. Even a single woman, that was wise, by her wisdom saved a city." ◆

THE CHRONOLOGY OF BENJAMIN FRANKLIN

1706

Benjamin Franklin was born in Boston on January 17 (January 6, old style).

1716

Assisted his father in his business of tallow chandler and soap boiler. He had attended school no more than two years.

1718

Was apprenticed as a printer to his brother James.

1721

Began to write anonymous articles for *The New-England Courant.*

1722

Became a vegetarian for a time to save money on food to buy books.

1723

Became publisher of *The New-England Courant.*

Left home on account of differences with his brother James, and finally landed "on a Sunday October morning," at High (Market) Street wharf in Philadelphia with only a Dutch dollar in his pocket and got employment in the printing office of Samuel Keimer.

1724

Went to London to buy printing material and, Governor Keith's assistance failing, worked in Palmer's and Watts' printing offices.

1726

He returned to Philadelphia with a Mr. Denham, who promised him a position in a mercantile venture just being started. In a brief time the death of Denham ended this connection and he again secured employment with Keimer.

1727

Formed among his ingenious acquaintances a club for mutual improvement, called the *Junto*, which later grew into the American Philosophical Society.

1728

Formed a partnership in the printing business with Hugh Meredith which continued two years.

Wrote his famous epitaph.

1729

Bought out *The Pennsylvania Gazette,* which he conducted until 1765.

1730

Assumed sole management of his printing business.

Appointed Public Printer by the Pennsylvania Assembly.

Married Deborah Read, of Philadelphia.

1731

Established the first circulating library on the North American Continent, The Library Company of Philadelphia—which is still in existence.

1732

Wrote and began the publication of *Poor Richard's Almanack.* The average sale for 25 years was 10,000 copies a year. Established the *Philadelphia Zeitung,* the first American newspaper to be printed in a foreign language.

1733

Established a printing office in Charleston, S.C.

1734

Elected Grand Master of the Masons in Pennsylvania.

1735

Published the first American translation from the Classics, a version by James Logan, of Cato's *Moral Distiches.*

1736

Francis Folger Franklin, a four-year-old son, died of smallpox. Chosen Clerk of the Pennsylvania Assembly.

Organized the first fire company in Philadelphia—the Union Fire Company.

1737

Appointed Postmaster at Philadelphia—a position he held continuously for sixteen years.

Made a Justice of the Peace.

1741

Established, in partnership with James Parker, a printing office in New Yrok.

Published *The General Magazine and Historical Chronicle.*

1742

Invented the Franklin Open Stove.

1743

Issued *A Proposal for Promoting Useful Knowledge among the British Plantations in America.*

1744

Published an *Account of the newly-invented Pennsylvanian Fire-Places.*

Published a reprint of *Pamela,* the first novel to be printed in America.

His only daughter, Sarah, was born.

Began his experiments in electricity.

1747

Propounded his theory of electricity, known as the *Franklinian Theory.*

France and Spain being at war with Great Britain, Philadelphia was in danger of attack by their privateers. He organized the citizens for the defense of Philadelphia.

1748

Retired from active business (at the age of 42), having accumulated a substantial fortune.

Sold his printing business to David Hall.

Chosen a member of the Council of Philadelphia. Propounded his theory of the electrical condition in the Leyden jar.

1749

Appointed by the Governor a Commissioner of the Peace, and reappointed in 1752.

Established the identity of lightning and electricity.

Published his *Proposals relating to the Education of Youth in Pennsylvania,* which led to the formation of the College (afterwards the University) of Pennsylvania, and he was chosen President of the Board of Trustees.

Made Provincial Grand Master of Pennsylvania.

1750

Elected to the Assembly of Pennsylvania and re-elected annually for 14 years.

The Assembly appointed him joint Commissioner with the Speaker (Mr. Norris) to make a treaty at Carlisle with the Indians.

1751

Promoted the founding of the Pennsylvania Hospital, the first of its kind in America (still in existence). He served as Clerk and subsequently as President of its Board of Managers.

Elected an Alderman.

His *Experiments and Observations on Electricity* was published in London.

1752

Aided in establishing the first chartered company in America for insuring against loss by fire—the Philadelphia Contributionship for the Insurance of Houses from Loss by Fire.

Made his celebrated kite experiments and discharged electricity from the clouds.

His *Experiments and Observations on Electricity* was translated into French and published at Paris.

1753

Recommended that pointed rods be placed on buildings to prevent their being struck by lightning.

The Royal Society awarded him the Copley Gold Medal, and Louis XV directed his thanks to be sent to him for his useful discoveries in electricity.

Harvard and Yale Colleges conferred on him the honorary degree of Master of Arts.

Appointed Deputy Postmaster General and held the appointment for twenty-one years.

1754

His *Plan of Union* was adopted by the Congress at Albany but failed to receive the approval of the Colonial Assemblies and the Lords of Trade.

1755

Sent to confer with Gen. Braddock and, in order to obtain the supplies for Braddock's army, he pledged his own property to upwards of 20,000 pounds in payment, and then "organized the transport and commissariat with an ability and foresight in marked contrast to the military conduct of the ill-fated expedition." He received the thanks of the Assembly for his great services.

Was later appointed a Commissioner for raising and expending money for the defense of the frontier against the French and Indians.

Was chosen Colonel by the regiment of foot raised in Philadelphia in this emergency.

Drafted the Militia Act of Pennsylvania.

His *New Experiments and Observations on Electricity, Made at Philadelphia* was published in London.

1756

Appointed by the Governor Military Commissioner for Northampton County, Pa.

Introduced street paving, cleaning and lighting into Philadelphia.

The Borough of Norfolk made him a Burgess and Freeman.

Elected Fellow of the Royal Society.

Elected a member of the Society for the Encouragement of Arts, Manufactures and Commerce, London.

The College of William and Mary, in Virginia, conferred the honorary degree of Master of Arts.

1757

The Assembly, finding that the Proprietaries persisted in requiring their Governors to withhold their assent from all tax bills which did not exempt their estates from the tax levied, resolved to petition the King against them and sent Franklin to England as their agent to present the petition and to urge their rights. He then suggested a compromise by which the unsurveyed lands of the Proprietaries were to be exempted, but the surveyed lands were to be assessed at the same rate as other property of that description. This was approved and made Franklin's first foreign mission a success.

1758

In the issue of *Poor Richard's Almanack* for this year, the last by him, he brought together the best of the wise-sayings, aphorisms, rhymes, etc., of the preceding twenty-four annual issues "as the harangue of a wise old man to the people attending an auction." It was at once copied into all the newspapers of the Continent, reprinted in Great Britain as a broadside, and two translations of it were printed in France. It has been reprinted again and again under the title of *Father Abraham's Speech, The Way to Wealth* or *La Science du Bonhomme Richard*, and has proved itself one of the most popular of American writings. A German translation of his *Electrical Experiments* was published at Leipzig.

The University of St. Andrews (Scotland) conferred on him the degree of Doctor of Laws.

Admitted as a "Burgess and Gild-brother of Edinburgh." Received the freedom of the city.

Was elected an Honorary Member of the Philosophical Society of Edinburgh.

1760

Wrote his so-called *Canada Pamphlet*. In the treaty of 1763 Great Britain secured the cession of Canada from France.

Was elected a member of the Council of the Royal Society, and again in 1766, in 1767 and in 1772.

Was appointed Provincial Grand Master of Philadelphia.

1762

The University of Oxford conferred upon him the degree of Doctor of Civil Law.

Returned to America and shortly afterwards received the thanks of the Assembly of Pennsylvania.

1763

Spent half the year in a tour through the northern Colonies, inspecting and regulating the post offices in the several provinces, and travelled 1,600 miles.

The Paxton massacre engaged his attention.

1764

Was elected Speaker of the Assembly and signed the petition to the King to convert Pennsylvania into a Royal Province. The question of taxing their estates had come up in a new form and finally resulted in Franklin's again being sent to England to petition the Crown for a change of government, and to represent the Province.

1765

While in England, as the agent selected to defend the rights of a single province at the Court of Great Britain, he became the bold defender of the rights of America in general. He exerted his powers in endeavors to prevent the introduction and later the passage of the Stamp Act.

1766

Underwent his memorable examination in the House of Commons relative to the repeal of the American Stamp Act. The light he threw upon Colonial affairs, probably more than all other causes combined, determined Parliament to repeal the bill. Travelled in Germany and Holland. Was elected a Foreign Member of the Königliche Gesellschaft der Wissenschaften at Göttingen.

1767

Appointed by "Order in Council" one of the Commissioners to settle the boundary between the Provinces of New York and New Jersey.

Sarah Franklin was married to Richard Bache. Among their descendants have been many eminent Americans.

1768

The Assembly of Georgia appointed him agent in England for that Colony, and reappointed him annually as long as he remained in Europe.

1769

Elected President of the American Philosophical Society and re-elected annually as long as he lived. Again visited France and found "our dispute much attended to."

Chosen by the House of Representatives of the Colony of New Jersey as their agent in London.

Benjamin Franklin Bache was born.

1770

The Assembly of Massachusetts appointed him agent in England for that Colony.

1771

Elected corresponding member of the Bataafsch Genootschap der Proefondervindelijke Wijsbegeerte, Rotterdam.

Made a tour through Scotland and Ireland.

Began to write his *Autobiography*.

Presented to Harvard "many valuable books."

1772

Elected one of the eight foreign members of the Royal Academy of Sciences of Paris.

Served on a Committee of the Royal Society to report on lightning conductors.

Transmitted the Hutchinson letters to America.

1773

A French translation of his works, edited by Dubourg, was published in Paris.

Sent Lord Dartmouth the petition of Massachusetts for the removal of Gov. Hutchinson.

1774

Underwent his examination before the Privy Council on the petition of the Massachusetts Assembly for the removal of Gov. Hutchinson, and on the transactions relating to Gov. Hutchinson's letters which had come into his possession.

Dismissed by the British Government from the office of Deputy Postmaster General in North America.

Communicated to the Royal Society his observations on the stilling of waves by means of oil.

Offered, at his own risk, to pay the whole damage of destroying the tea at Boston, provided the Acts made against the Province of Massachusetts Bay were repealed.

Prepared for the information of the British Ministry *Terms that might probably produce a durable union between Great Britain and the Colonies.*

Presented to Lord Dartmouth the petition to the King adopted by the first Continental Congress.

Mrs. Benjamin Franklin died.

Returned to Philadelphia, arriving on May 5.

The Assembly of Pennsylvania unanimously elected him a delegate to the second Continental Congress, about to assemble at Philadelphia. In this Congress he served on ten major committees.

Appointed by the Congress on the Committee to draft a petition to the King.

Appointed by the Congress on the Committee to draw up *A Declaration by the Representatives of the United Colonies of North America, now met in Congress at Philadelphia, setting forth the causes and necessity of their taking up arms.*

Appointed by the Assembly of Pennsylvania a member of the Committee of Safety for the defence of the Province against insurrection and invasion, and unanimously elected Chairman.

Proposed in the Congress *Articles of Confederation and Perpetual Union.*

Appointed by the Congress on the Committee to consider and report on the resolution of the House of Commons, commonly called Lord North's plan for conciliation.

Elected unanimously by the Congress Postmaster General of the Colonies.

Appointed by the Congress on the Committee to repair to the camp at Cambridge and confer with Gen. Washington and others touching the most effectual method of continuing, supporting and regulating a Continental army.

Appointed by the Congress on the Committee to correspond "with our friends in Great Britain, Ireland, and other parts of the world."

1776

Planned an appeal from the Congress to France for aid and wrote the instructions of Silas Deane, a member of the Congress, who was to convey it.

Appointed by the Congress a Commissioner to Canada to negotiate a union with the Colonies.

Appointed by the Congress on the Committee to draft the Declaration of Independence.

Represented the city of Philadelphia in the Conference of Committees of the Province of Pennsylvania, held pursuant to the resolution of the Congress, "to adopt such government as shall in the opinion of the representatives of the people best conduce to the happiness and safety of their constituents in particular and America in general,"

which finally renounced allegiance to Britain.

Elected to represent Philadelphia in the Convention to frame a Constitution for the State.

Unanimously chosen President of the Convention which framed a Constitution for the State of Pennsylvania.

Signed the Declaration of Independence.

Appointed by the Pennsylvania Convention a Justice of the Peace of the City and County of Philadelphia.

Appointed by the Congress to confer with Lord Howe on the subject of reconciliation.

Unanimously appointed by the Congress one of the three Commissioners to the Court of France to secure the aid and co-operation of that country.

He collected all the money he could command, amounting to between 3,000 and 4,000 pounds, and loaned it to the Congress, which demonstration of his confidence encouraged others to lend their money in support of the cause.

In October he started on his mission in the sloop of war *Reprisal*, and arrived in France on December 4. Richard Bache became Postmaster General.

1777

Appointed by the Congress Commissioner to the Court of Spain, but declined on account of age and health.

Elected a member of the Royal Medical Society of Paris.

Elected by the Pennsylvania Assembly a delegate to the Congress.

Obtained from France a gift of 2,000,000 livres.

1778

Negotiated a treaty of amity and commerce and also a treaty of alliance with France.

Declined to consider a peace with Great Britain which included an offensive alliance against France.

An office, a pension for life and a peerage were held out to Franklin as a reward for betraying the American cause, and his refusal of these proposals was one of the most notable productions of his pen.

Appointed by the Congress Minister Plenipotentiary to the Court of France.

Obtained from France a loan of 3,000,000 livres.

1779

Obtained from France a further loan of 1,000,000 livres.

An edition of his *Works*, edited by Vaughan, was published in London.

1780

Obtained from France another loan of 4,000,000 livres.

A German translation of his *Works* was published.

1781

Elected a Fellow of the American Academy of Arts and Sciences, Boston.

Tendered to the Congress his resignation as Minister to France on account of age and health, but the Congress declined to accept it and requested his continuance in their service till the peace.

Appointed by the Congress one of the Commissioners to negotiate a peace with Great Britain.

Elected one of the twenty-four foreign members of the Academy of Science, Letters and Arts of Padua.

Obtained a loan of 5,000,000 florins from Holland and from France a further loan of 4,000,000 livres.

1782

Obtained from France another loan of 6,000,000 livres.

Entered into a treaty with the King of France for the repayment of loans, which in all amounted to 18,000,000 livres.

Presented a "rich donation of Works" to the Public Library at Franklin, Massachusetts.

Elected Venerable (W. M.) of *Loge des IX Soeurs, Grand Orient de Paris.*

Appointed by the Congress a Commissioner to negotiate a treaty of peace with Great Britain.

Proposed to the British Commissioner to abolish privateering and neutralize non-combatants and their property.

Negotiated a preliminary treaty of peace with Great Britain.

1783

Negotiated an armistice with Great Britain.

Negotiated a contract with the King of France for a further loan of 6,000,000 livres.

Concluded a treaty of amity and commerce with the King of Sweden.

Negotiated the definitive treaty of peace with Great Britain, in which the independence of the United States was recognized.

Witnessed the ascension of a Montgolfier balloon and wrote accounts of these first balloon experiments.

Was elected an Honorary Fellow of the Royal Society of Edinburgh.

An Italian translation of his *Works* was published.

1784

Appointed by Louis XVI one of the Commissioners to investigate the theories of Mesmer, and their report resulted in the exposure of animal magnetism and flight of Mesmer.

Elected a member of the Royal Academy of History of Madrid.

1785

Elected an Honorary Member of the Manchester (Eng.) Literary and Philosophical Society.

Elected Honorary Associate of the Société Royale de Physique, d'Histoire Naturelle et des Arts d'Orléans.

Elected Vénérable d'Honneur of R. L. de Saint Jean de Jerusalem.

Elected Associate Member of the Académie des Sciences, Belles Lettres et des Arts, of Lyons.

Signed a treaty of amity and commerce with the King of Prussia, in which he embodied his advanced views on neutrality, privateering and the exemption of private property from capture at sea, which he had published in a pamphlet in that same year.

Set out for Havre on his return to America. The infirmity under which he labored rendered the motion of a carriage insupportable, and the Queen's litter, borne by Spanish mules, was graciously placed at his disposal and conveyed him from Passy to Le Havre. On his taking farewell leave, the King of France presented to him his miniature surrounded with 408 diamonds.

Landed at Philadelphia.

Was elected a Councillor by the City of Philadelphia, and was unanimously elected President of the Council.

Presented to the American Philosophical Society a lengthy paper *On the Causes and Cure of Smoky Chimneys.*

Was chosen President (Governor) of Pennsylvania by a vote of 76 out of 77 votes cast, and was unanimously re-elected in 1786 and 1787. He declined to benefit by the compensation given by the State for his services as its President, and devoted the same to public uses, such as colleges, schools, building of churches, etc.

Established a type foundry with French equipment.

Contributed to the American Philosophical Society a paper *Containing Sundry Maritime Observations*, which included the subjects of the best form of rigging to improve the swiftness of vessels, the avoidance of accidents that may occasion loss of ships at sea, and his observations on the course, velocity and temperature of the Gulf Stream, for the benefit of navigation on the Atlantic coast.

The western territory of North Carolina was organized into a State and, in compliment to Franklin, was called the State of Franklin, but after a brief existence it gave up the struggle; a decade later it was again organized as a State and called the State of Tennessee.

1786

Contributed to the American Philosophical Society *A Description of a New Stove for Burning of Pit Coal and Consuming all its Smoke* and a paper on *A Slowly Sensible Hygrometer.*

Elected Corresponding Member of the Societa Patriotica diretta all' Avanzamento dell Agricoltura, delle Arti e delle Manifatture di Milano.

Was active in promoting the foundation of a College known as Franklin College, later joined with Marshall College as Franklin and Marshall College.

1787

Took an active part in establishing *The Society for Political Enquiries*, which had for its object mutual improvement in the knowledge of government and the advancement of political science.

As delegate from Pennsylvania to the Convention helped to frame the Constitution of the United States.

Elected Honorary Member of the Medical Society of London.

An edition of his *Philosophical and Miscellaneous Papers* was published in London.

1788

Helped to organize the first society formed for the abolition of slavery and, as its President, later wrote and signed the first remonstrance against slavery addressed to the American Congress.

1789

Elected a Member of the Imperial Academy of Sciences of Saint Petersburg (Russia).

1790

Died in Philadelphia, April 17.

Buried in Christ Church Burying Ground, southeast corner of Fifth and Arch Streets, Philadelphia.

He had "nations for his mourners and the great and good throughout the world as his eulogists."

Congress being then in session, the House of Representatives resolved, "That the members shall wear the customary badge of mourning for one month, as a mark of veneration to the memory of a citizen whose native genius was not more an ornament to human nature than his various exertions of it have been precious to science, to freedom and to his country."

In the French Assembly, upon the announcement of his death, it was decreed "that the National Assembly shall wear mourning during three days for Benjamin Franklin," and formal eulogiums were pronounced before the Assembly and the Municipality of Paris. Mirabeau referred to him as "That sage whom two worlds claim as their own."

FRANKLIN'S OUTSTANDING ACHIEVEMENTS

1 FRANKLIN DISCOVERED that lightning is electricity. The world believed up to his time that lightning was caused by poisonous gases exploding in the air. Franklin proved, first by observation and logic, and second by actual test with his kite, that lightning and electricity are identical.

2 FRANKLIN INVENTED the lightning rod which Dr. Charles P. Steinmetz of the General Electric Company said is still the best and most reliable protection we have against lightning.

3 FRANKLIN WAS THE FIRST to discover that a current of electricity has a magnetic effect, i. e., that it can magnetize a piece of steel. He found that a wire carrying a current of electricity and wound around a piece of iron, makes the iron a magnet.

4 FRANKLIN GAVE THE WORLD the best theory of electricity. After more than 150 years of further investigation and controversy, modern science has finally adopted his early conclusions. These were that electricity consists of very minute particles, so small that they can pass between the atoms of ordinary matter. He believed that these minute particles of electricity, or atoms of electricity, repel each other and are attracted by the atoms of ordinary matter. This is precisely the view held today by men of science.

5 HE WAS THE FIRST man to discharge an explosive, located at a distance, by an electric current sent over a wire.

6 HE INVENTED the Franklin stove, the first successful wood-burning stove used in this country.

7 HE INVENTED the invaluable contrivance by which a fire consumes its own smoke, and made the first smoke-consuming stove or furnace.

8 HE DELIVERED MANKIND from the nuisance, once universal, of smoky chimneys. His pamphlet, *Cause and Cure of Smoky Chimneys*, revealed the correct principles of chimney construction and rid the world of smoky chimneys and fireplaces.

9 HE HELPED TO ESTABLISH the first chartered fire insurance company in America.

10 WHOEVER DID MORE for a city than Franklin did for Philadelphia? He caused the city to be paved; he invented a better type of street lamp for lighting the city; and he organized the first street cleaning.

11 HE INVENTED a copying press for taking copies of letters or other writing.

12 HE INVENTED double spectacles—near and farsight glasses—making a pair for his own use.

13 HE IS CREDITED with the invention of a laundry mangle. In his *Diary*, Washington records seeing a demonstration of this machine.

14 HE INVENTED the Harmonica, or Armonica as he called it, which was a musical instrument consisting of a series of graduated glass bowls, pierced by a spindle, and revolved by a foot treadle. The music was produced by holding one's fingers against the moistened glass.

15 FRANKLIN WAS ONE of the first American song-writers. He wrote among other songs, a *Sailor Song, The Mother Country, My Plain Country Joan,* and *Fair Venus Calls*, which have been published by the National Bureau for the Advancement of Music. He was a leader in the musical world of his time, wrote on musical harmony, and played on several musical instruments, including the harp, the guitar, the violin, and the Harmonica or glassychord which he invented.

16 AMONG FRANKLIN'S many inventions should be included a three-wheel clock, a library chair that could be converted into a step-ladder, an artificial arm for taking books down from high shelves in a library, a one-arm chair that could be used like a desk or table for writing, the pulse glass, and an electric jack for turning a roast of meat over the fire. It was his fixed policy to give his inventions to the world, and not to secure patents on them, or to make any profit out of them.

17 ALTHOUGH NOT the discoverer, he was the first to demonstrate the production of cold by evaporation, a fact up to that time unknown to science.

18 WHEN THERE were no bathtubs in American homes, and the general custom was to bathe but seldom, Franklin was an advocate of frequent bathing, and took a hot bath twice a week. Franklin also advocated and practiced air-bathing.

19 FRANKLIN WAS THE ORIGINATOR of the modern science of the art of ventilation. He was the first to discover the poisonous quality which repeated respirations impart to the air in a room. He was the first to call attention to the folly of excluding fresh air from hospitals and sick rooms.

20 FRANKLIN MADE tests of various colored cloths on snow which showed that black and dark colors attract the heat of the sun and that white does not attract the heat. He made recommendations regarding white clothes for the tropics and white cloth helmets for the troops in India which were adopted many years later by the British.

21 HE POINTED OUT the advantage, later adopted universally, of building ships with water-tight compartments, taking the hint from the Chinese.

22 HE WAS THE FIRST to discover that the temperature of the Gulf Stream is higher than that of the surrounding water, and the first to have the Gulf Stream charted.

23 HE WAS THE FIRST to demonstrate that oil on the water will still the waves.

24 HE WAS THE FIRST to discover that northeast storms come out of the southwest, in other words, that storms travel in an opposite direction to the winds.

25 HIS INVESTIGATIONS concerning the weather resulted in the establishment of our United States Weather Bureau of which he is today acknowledged to be the father.

26 FRANKLIN WAS perhaps the best swimmer in the American Colonies, taught swimming, and his swimming feats when he went to England were the talk of that nation.

27 WITH LORD DESPENCER, Franklin revised the Prayer Book of the Church of England. This was not adopted in England but was later adopted in part of America. Franklin's purpose was, as Parton says: *To extinguish theology, which he thought divided and distracted mankind to no purpose, and to restore religion, which he believed tended to exalt, refine, unite, assure, and calm the anxious sons of men.*

28 FRANKLIN CONCEIVED and organized the *Junto*, the forerunner of all Rotary, Kiwanis, Lions and Civitan clubs of today. The *Junto* developed into the *American Philosophical Society*, America's first organization of scientists, in which he took great interest and pride, and of which he is justly acknowledged to be the founder.

29 FRANKLIN CONCEIVED the idea and established in Philadelphia the first successful circulating library, the mother of all our free circulating libraries of today.

30 FRANKLIN FOUNDED the University of Pennsylvania.

31 FRANKLIN ORIGINATED the elective system of college studies and also the so-called "group" system, adopted years later by many of America's leading universities. He was the first writer on education to recommend the teaching of modern languages, such as French and German, in preference to the exclusive study of Latin and Greek. Franklin was the first American educator to appreciate the importance of advanced teaching of history, political economy, and the science of government, also of technical training in agriculture and in the arts and sciences. He was likewise the first to prescribe athletics as an adjunct of college education.

32 FRANKLIN, and not Thomas Jefferson, should be credited with having started the study of vertebrate paleontology in America, for he wrote a letter to George Croghan discussing the so-called elephant's tusks and grinders that had been found near the Ohio River. This was more than thirty years before Jefferson read a paper on the same subject before the American Philosophical Society.

33 FRANKLIN INTRODUCED the following useful plants or grains into America from Europe: *Scotch kale, the kohlrabi, Chinese rhubarb and Swiss barley.* He promoted silk culture in Pennsylvania. He introduced the yellow willow into America for basket making. He taught the farmers of Pennsylvania to plaster their land. He introduced broom corn into Pennsylvania from Virginia. He introduced fowl meadow grass into England from America, and the "Newtown Pippin" apple. He also introduced Newtown Pippin apples from grafts into France, together with various American trees, nut-bearing trees, and shrubs.

34 FRANKLIN WAS THE FIRST American economist. He was also the first president of the Society for Political Inquiries of Philadelphia, the first society in the United States interested in promoting the study of political economy.

35 FRANKLIN STARTED the first thrift campaign, and that campaign is still going on. His maxims of *Poor Richard* did more to encourage thrift and industry in the Colonies than any other one thing and they were circulated all over the world.

36 FRANKLIN WAS THE FIRST to propose daylight saving time.

37 FRANKLIN DEVISED a reformed alphabet which was based on simplified or phonetic spelling.

38 FRANKLIN DEVISED the first scheme for uniting the Colonies, more than twenty years before the Revolution, and his plan of confederation was finally adopted in all its essential features and binds our Union together today. If this plan had been carried out when Franklin proposed it, he believed it would have prevented the Revolutionary War, and would have secured our independence without a single battle.

39 FRANKLIN ORGANIZED our postal service and was our first Postmaster General.

40 MORE THAN ANY OTHER MAN, Franklin was instrumental in securing the repeal of the *Stamp Act*.

41 THOMAS PAINE who wrote the propaganda that inflamed the American Colonies, and that kept the Revolution alive during its darkest hours, was induced to come to America through the advice and encouragement of Benjamin Franklin.

42 IF FRANKLIN DID NOT originally suggest the Continental Congress, he was one of the very first to approve it. Long before the majority in the Continental Congress could see the wisdom of his purpose or were even willing to consider the idea, he prepared the first plan of confederation of the Colonies to be presented to that body, and suggested a name, *The United Colonies of North America*.

43 FRANKLIN HELPED Thomas Jefferson to write the *Declaration of Independence*.

44 FRANKLIN WAS our greatest diplomat and secured for us the aid of France in the Revolution and millions in money without which our independence at that time could not have been established.

45 FRANKLIN EDITED the best newspaper and the most successful newspaper in all the Colonies. He was the first to attempt to illustrate the news in an American newspaper, and also the first to publish questions and answers in a newspaper. He is said to have drawn the first newspaper cartoon, the picture of a snake cut into sections to represent the Colonies before the Revolution.

46 HE WAS INSTRUMENTAL in establishing eighteen paper mills in the American Colonies.

47 "FRANKLIN," says Parton, "was the first to turn to great account the engine of advertising, now an indispensable element in modern business."

48 FRANKLIN ESTABLISHED in 1732, the *Philadelphia Zeitung* the first American newspaper to be printed in a foreign language.

49 FRANKLIN MADE a comfortable fortune in the printing business in twenty years. He retired from active business at forty-two years of age so as to be able to devote the remainder of his life to scientific study and "to doing good."

50 IN THE FRENCH and Indian War, after the defeat of Braddock, Franklin was called upon to help save the Province of Pennsylvania from the attacks of Indians, who were scalping entire families within eighty miles of Philadelphia. He organized and commanded a regiment of 560 men to defend the northwestern frontier. He marched in winter up the Lehigh Valley to Gnadenhutten, where an entire settlement had been destroyed, and built three forts in that vicinity. At the opening of the Revolutionary War, before going to France, he planned the defenses of the Delaware, built forts and batteries, and the famous *chevaux-de-frise* which delayed the British fleet two months in its advance up the river.

51 OF ALL THE PATRIOTS, Franklin was the only one to sign all five of the great state papers that achieved our independence—the Declaration of Independence, the Treaty of Amity and Commerce with France, the Treaty of Alliance with France, the Treaty of Peace with England, and the Constitution of the United States.

52 SMYTH SAYS that Franklin "is easily first among the giant race of pamphleteers and essayists, most of whom went before, but a few of whom came immediately after, the war for independence."

53 FRANKLIN WAS a master propagandist—America's first. He constantly issued pamphlets, or wrote newspaper articles, to promote the interests of his city, of his country, or the good of mankind. His methods were always the same in promoting a cause: To develop informed public opinion on the question he first wrote something for publication that would attract public attention. In Philadelphia, he wrote and published an anonymous pamphlet, *A Modest Enquiry into the Nature and Necessity of a Paper Currency* (1729), which forced a new issue of paper money (which he printed). Another—*Plain Truth* (1747)—pointed out the helplessness of the Pennsylvania Province against attack by French and Spanish privateers, and led to the organization of the first militia. With newspaper articles, broadsides, or pamphlets, he was able to establish the first fire engine company in Philadelphia, the first street cleaning, and the first paving. With a pamphlet (1749) he helped to start the Philadelphia Academy, later the University of Pennsylvania; and with another (1751) he expedited the founding of the first hospital in America—the Pennsylvania Hospital. In England, Franklin was a propagandist for all of the American Colonies. Through his articles and letters in the English press, also by pamphlets, he constantly promoted the interests of America. The causes of American discontent with British rule, advice to people thinking of settling in America, and many similar topics, were the subject of his pen. Everybody in England soon came to look to Franklin to speak for America. *Observations Concerning the Increase of Mankind, Peopling of Countries, etc.* (1755) explained that the growth of America did not impoverish England. *The Interest of Great Britain Considered, with regard to her colonies, and the Acquisitions of Canada and Guadaloupe* (1760) was written in collaboration with another man. Public opinion was thereby so influenced that Canada was retained as a British Province. Franklin is also said to have suggested, in 1758, the sending of Wolfe to Canada. *Cool Thought on the Present Situation of our Public Affairs* (1764) was an argument against the proprietary government of the descendants of William Penn in Pennsylvania. *Rules for Reducing a Great Empire to a Small One* (1773) was a political satire; his *Edict by the King of Prussia* (1773) was a hoax. At his residence in Passy, France, Franklin set up a private printing plant, issuing many pieces both to aid his country and to amuse his friends. He used printing to help float *Liberty Loans* for the Colonies. One effective broadside was the fictitious copy of a Boston newspaper—a *Supplement to The Boston Independent Chronicle* (1782) which contained an account of a large quantity of American scalps, captured from Indians in British pay. Thus Franklin brought home to Europeans atrocities as perpetrated by England's allies.

54 FRANKLIN WAS the originator of the idea of a League of Nations, according to a statement made by Rear Admiral Thomas P. Magruder at the 1927 Franklin's Birthday luncheon of the Poor Richard Club of Philadelphia. He said that Franklin suggested "a united party of virtue, an international organization such as the present League of Nations is supposed to be, and which would consider world matters from the viewpoint of all nations."

55 FRANKLIN'S LAST GREAT WORK for his country was in the Constitutional Convention which met in Philadelphia in May, 1787. Although now eighty-one years of age and part of the time so weak in his legs that he had to be carried to and from the Convention in a sedan chair, he attended regularly, five hours a day for more than four months. At the suggestion of Washington, the delegates greeted him standing. Washington in the chair and Franklin on the floor worked together. They carried the Convention through in spite of obstacles and differences of opinion that, but for them, would have proved fatal to the establishment of the Constitution at this time. With a few words or a humorous story Franklin would demolish a long opposing speech of a delegate, or ease the situation over a critical period. Several times, it is said, the delegates broke up to return home, but Franklin got them together again and persuaded them to continue. At one time when it seemed that the Convention must dissolve without accomplishing anything, Franklin offered his famous resolution for prayers, saying that in the beginning of the contest with Britain the Continental Congress had offered daily prayers "in this room" for Divine protection, and that these prayers were heard and graciously answered.

56 IT WAS FRANKLIN'S compromise idea regarding the Senate and the House of Representatives that saved the Constitution. The delegates to the Constitutional Convention in Philadelphia were irreconcilably divided over the question of how the states should be represented in the Congress. The smaller states wanted to be represented as states on an equal voting basis with the states of large population. And the larger states were resolved to be represented only by population. Franklin himself was for one national legislative body only, and that body to represent the states according to their population. But when danger threatened the establishment of the Constitution and the United States of America, he gave up his own wishes, and proposed what Parton says was the "happiest political expedient ever devised," a Senate to represent all the states equally, and a House of Representatives to represent the states according to their population.

57 FRANKLIN ORGANIZED the first anti-slavery society and made the first protest to Congress against Negro slavery. His last public act was to write against slavery, twenty-four days before he died, one of his most telling satirical pieces for the "Federal Gazette."

58 PARTON SAYS that Franklin was the founder of the Democratic party in American politics, that great party which Parton maintains was always right on every leading issue throughout all the early years of the Republic.

59 PARTON SAYS that the greatest event in Franklin's life was his deliberate and final choice to dedicate himself to virtue and the public good.

60 FRANKLIN'S WORK in establishing the independence of our country in the very beginning was so important that he was the one who was first called the Father of His Country. That title years later passed to Washington. But Carlyle said Franklin was "Father of all the Yankees." ◆

Luxury, Idleness, and Industry

by Benjamin Franklin

It is wonderful how preposterously the affairs of this world are managed. Naturally one would imagine that the interest of a few individuals should give way to general interest: but individuals manage their affairs with so much more application, industry and address, than the public do theirs, that general interest most commonly gives way to particular. We assemble parliaments and councils, to have the benefit of their collected wisdom; but we necessarily have, at the same time, the inconvenience of their collected passions, prejudices and private interests. By the help of these, artful men overpower their wisdom, and dupe its possessors; and if we may judge by the acts, *arrêts*, and edicts, all the world over, for regulating commerce, an assembly of great men is the greatest fools upon earth.

I have not yet, indeed, thought of a remedy for luxury. I am not sure that in a great State it is capable of a remedy; nor that the evil in itself is always so great as is represented. Suppose we include in the definition of luxury all unnecessary expense, and then let us consider whether laws to prevent such expense are possible to be executed, in a great country, and whether, if they could be executed, our people generally would be happier, or even richer. Is not the hope of being one day able to purchase and enjoy luxuries a great spur to labor and industry? May not luxury therefore produce more than it consumes, if, without such a spur, people would be, as they are naturally enough inclined to be, lazy and indolent.

In our commercial towns upon the sea-coast, fortunes will occasionally be made. Some of those who grow rich will be prudent, live within bounds, and preserve what they have gained for their posterity; others, fond of showing their wealth, will be extravagant, and ruin themselves—Laws cannot prevent this; and perhaps it is not always an evil to the public. A shilling spent idly by a fool may be picked up by a wiser person, who knows better what to do with it. It is therefore not lost. A vain silly fellow builds a fine house, furnishes it richly, lives in it expensively, and in a few years ruins himself; but the masons, carpenters, smiths, and other honest tradesmen, have been by his employ assisted in maintaining and raising their families; the farmer has been paid for his labor, and encouraged, and the estate is now in better hands. In some cases, indeed, certain modes of luxury may be a public evil, in the same manner as it is a private one. If there be a nation, for instance, that exports its beef and linen, to pay for the importation of claret and porter, while a great part of its people live upon potatoes, and wear no shirts; wherein does it differ from the sot, who lets his family starve, and sells his clothes to buy drink? Our American commerce is, I confess, a little in this way. We sell our victuals to the islands for rum and sugar; the substantial necessaries of life for superfluities. But we have plenty, and live well nevertheless.

The vast quantity of forest land we have yet to clear and put in order for cultivation, will for a long time keep the body of our nation laborious and frugal. Forming an opinion of our people, and their manners, by what is seen among the inhabitants of the seaports, is judging from an improper sample. The people of the trading towns may be rich and luxurious, while the country possesses all the virtues that tend to promote happiness and public prosperity. Those towns are not much regarded by the country; they are hardly considered as an essential part of the States; and the experience of the last war has shown, that their being in the possession of the enemy did not necessarily draw on the subjection of the country; which bravely continued to maintain its freedom and independence notwithstanding.

It has been computed by some political arithmetician, that if every man and woman would work for four hours each day on something useful, that labor would produce sufficient to procure all the necessaries and comforts of life; want and misery would be banished out of the world, and the rest of the twenty-four hours might be leisure and pleasure.

What occasions then so much want and misery? It is the employment of men and women in works that produce neither the necessaries nor the conveniences of life; who, with those who do nothing, consume necessaries raised by the laborious. To explain:

The first elements of wealth are obtained by labor from the earth and waters. I have land, and raise corn. With this, if I feed a family that does nothing, my corn will be consumed, and at the end of the year I shall be no richer than I was at the beginning. But if, while I feed them, I employ them, some in spinning, others in making bricks, etc. for building, the value of my corn will be arrested and remain with me, and at the end of the year we may all be better clothed and better lodged. And if, instead of employing a man I feed in making bricks, I employ him in fiddling for me, the corn he eats is gone, and no part of his manufacture remains to augment the wealth and convenience of the family.

Look round the world, and see the millions employed in doing nothing, or in something that amounts to nothing, when the necessaries and conveniences of life are in question. What is the bulk of commerce, for which we fight and destroy each other, but the toil of millions for superfluities, to the great hazard and loss of many lives, by the constant dangers of the sea? How much labor is spent in building and fitting great ships, to go to China and Arabia for tea and coffee, to the West Indies for sugar, to America for tobacco! These things cannot be called the necessaries of life, for our ancestors lived very comfortably without them.

It is, however, some comfort to reflect that, upon the whole, the quantity of industry and prudence among mankind exceeds the quantity of idleness and folly. Hence the increase of good buildings, farms cultivated, and populous cities filled with wealth, all over Europe, which a few ages since were only to be found on the coast of the Mediterranean; and this notwithstanding the mad wars continually raging by which are often destroyed, in one year, the works of many years' peace. So that we may hope, the luxury of a few merchants on the coast will not be the ruin of America.

Almost all parts of our bodies require some expense. The feet demand shoes, the legs stockings; the rest of the body clothing; and the belly a good deal of victuals. Our eyes, though exceedingly useful, ask, when reasonable, only the cheap assistance of spectacles. But the eyes of other people are the eyes that ruin us. If all but myself were blind, I should want neither fine clothes, fine houses, nor fine furniture. ◆

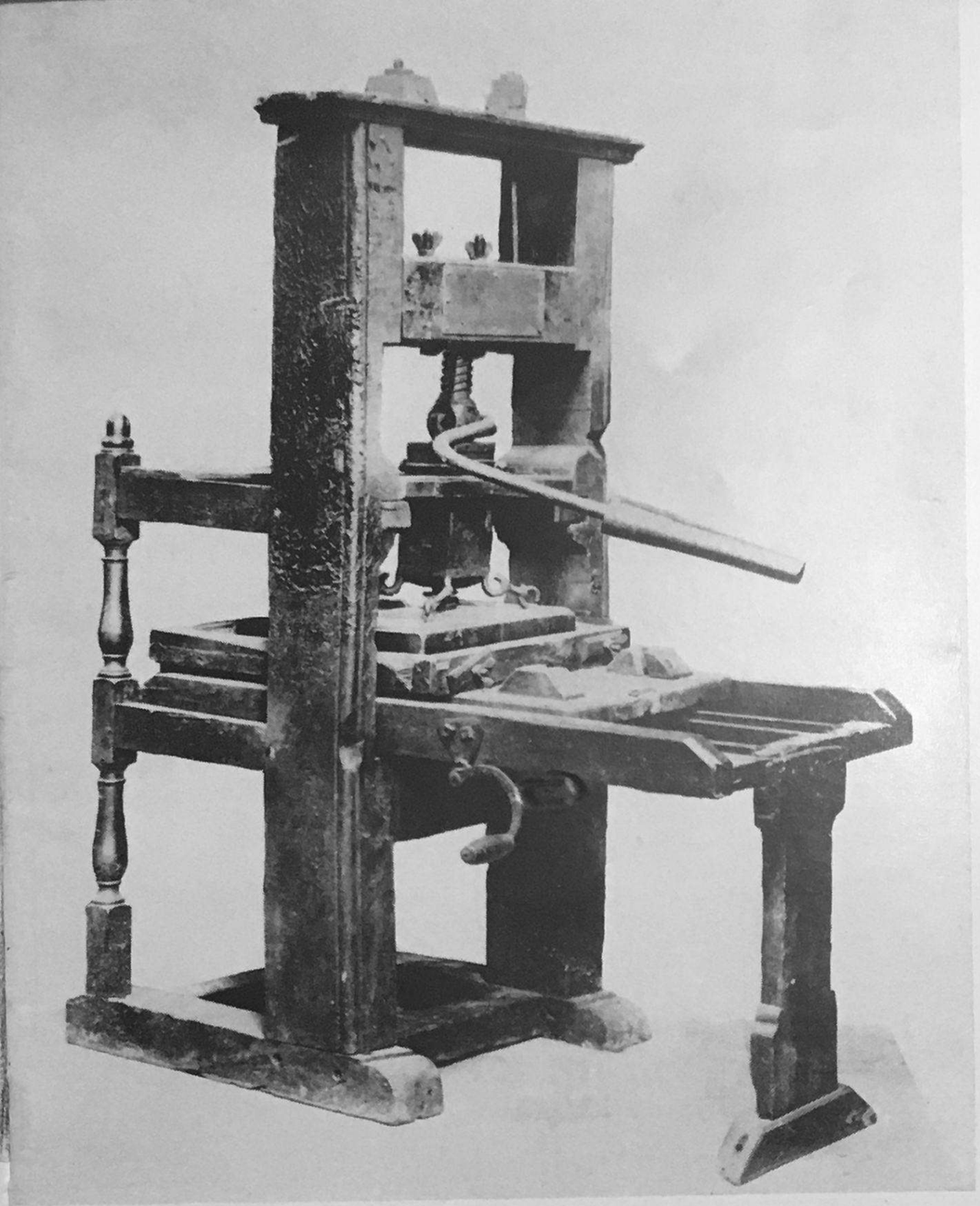
A FRANKLIN PORTFOLIO

Munching bread on his first visit to Philadelphia, Franklin cut "an awkward and ridiculous figure" in the eyes of his future wife, Deborah Read.

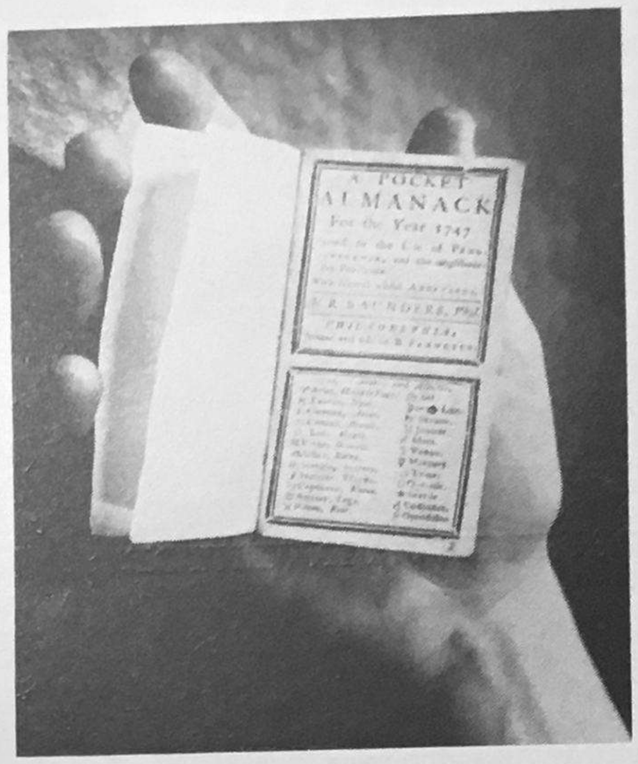
BENJAMIN FRANKLIN . . . PRINTER

Apprenticed to printing as a youth, Franklin soon became fascinated by the trade, which provided an invaluable opportunity for his self-education. Throughout his later life he retained a close interest in printing, and even when eminent would describe himself as: Benjamin Franklin, Printer. It is said that he never missed an opportunity to praise a workman, and nowhere did he show more pride than in his own particular craft. His interest in printing led to simultaneous careers as author and publisher.

As a young man in Philadelphia, Franklin soon earned a reputation with Keimer the printer.

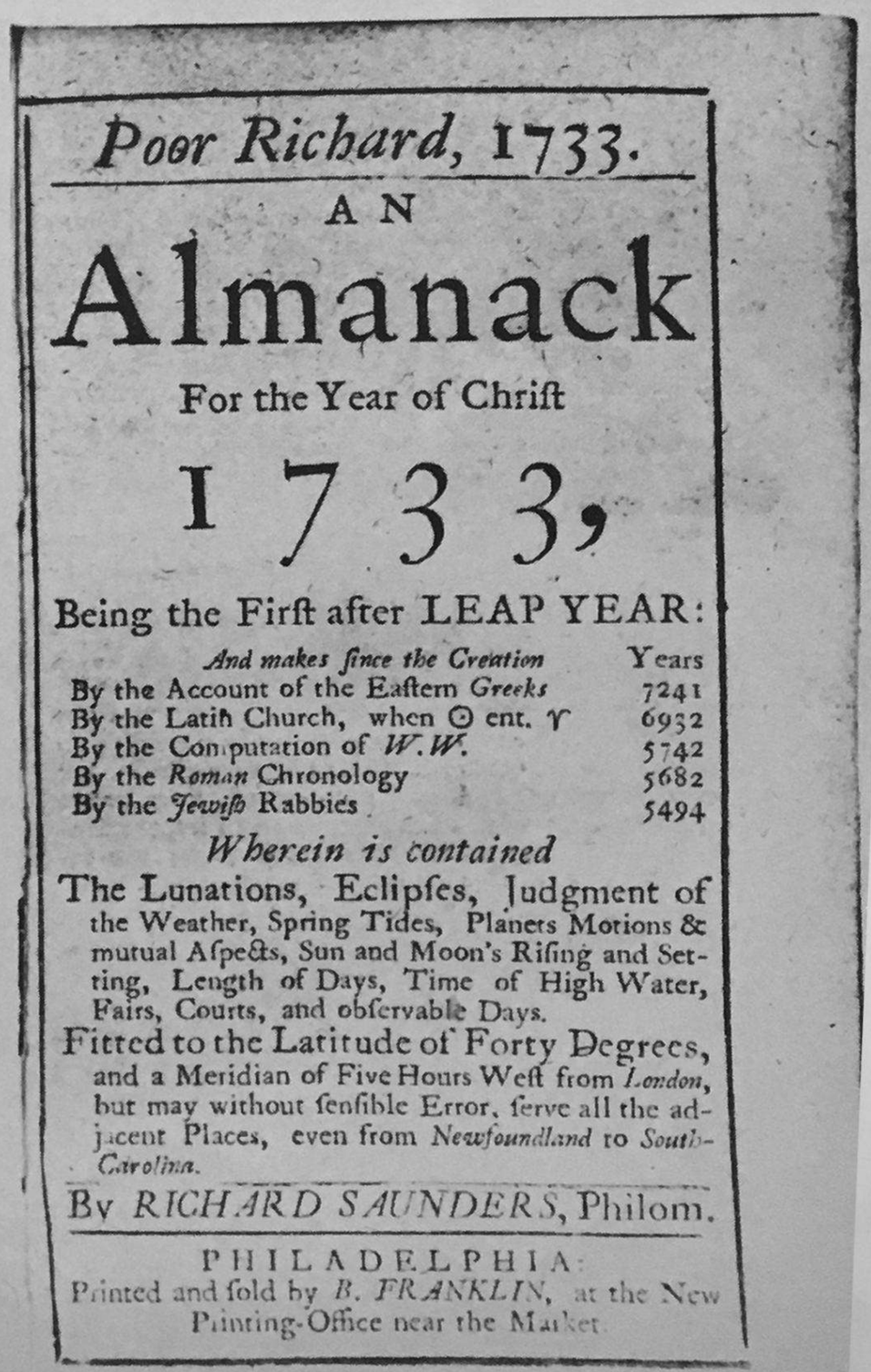


This screw press was operated by Franklin. The lever action pressed a single sheet of paper down on a bed of inked type.



Franklin published two almanacs: the 'Pocket Almanack,' above, and the 'Poor Richard Almanack,' below. The latter achieved great fame, largely because of the practical sayings which enriched its pages with wit and wisdom.

Original ink pot and pads used by Benjamin Franklin.



Poor Richard, 1733.

AN

Almanack

For the Year of Chrift

1733,

Being the Firft after LEAP YEAR:

And makes ſince the Creation	Years
By the Account of the Eaſtern *Greeks*	7241
By the Latin Church, when ☉ ent. ♈	6932
By the Computation of *W.W.*	5742
By the *Roman* Chronology	5682
By the *Jewiſh* Rabbies	5494

Wherein is contained

The Lunations, Eclipſes, Judgment of the Weather, Spring Tides, Planets Motions & mutual Aſpects, Sun and Moon's Riſing and Setting, Length of Days, Time of High Water, Fairs, Courts, and obſervable Days.

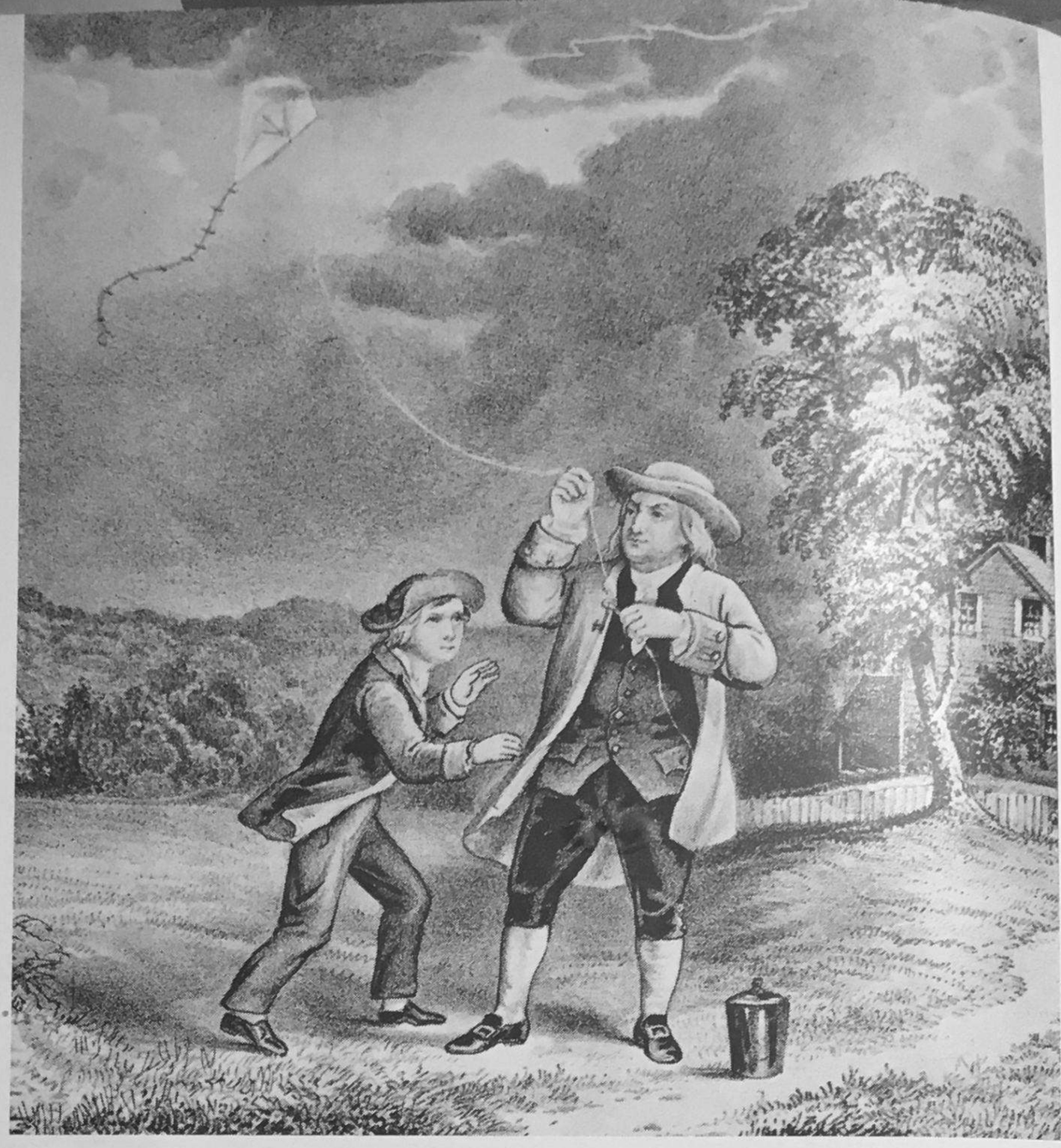
Fitted to the Latitude of Forty Degrees, and a Meridian of Five Hours Weſt from *London*, but may without ſenſible Error, ſerve all the adjacent Places, even from *Newfoundland* to *South-Carolina*.

By *RICHARD SAUNDERS*, Philom.

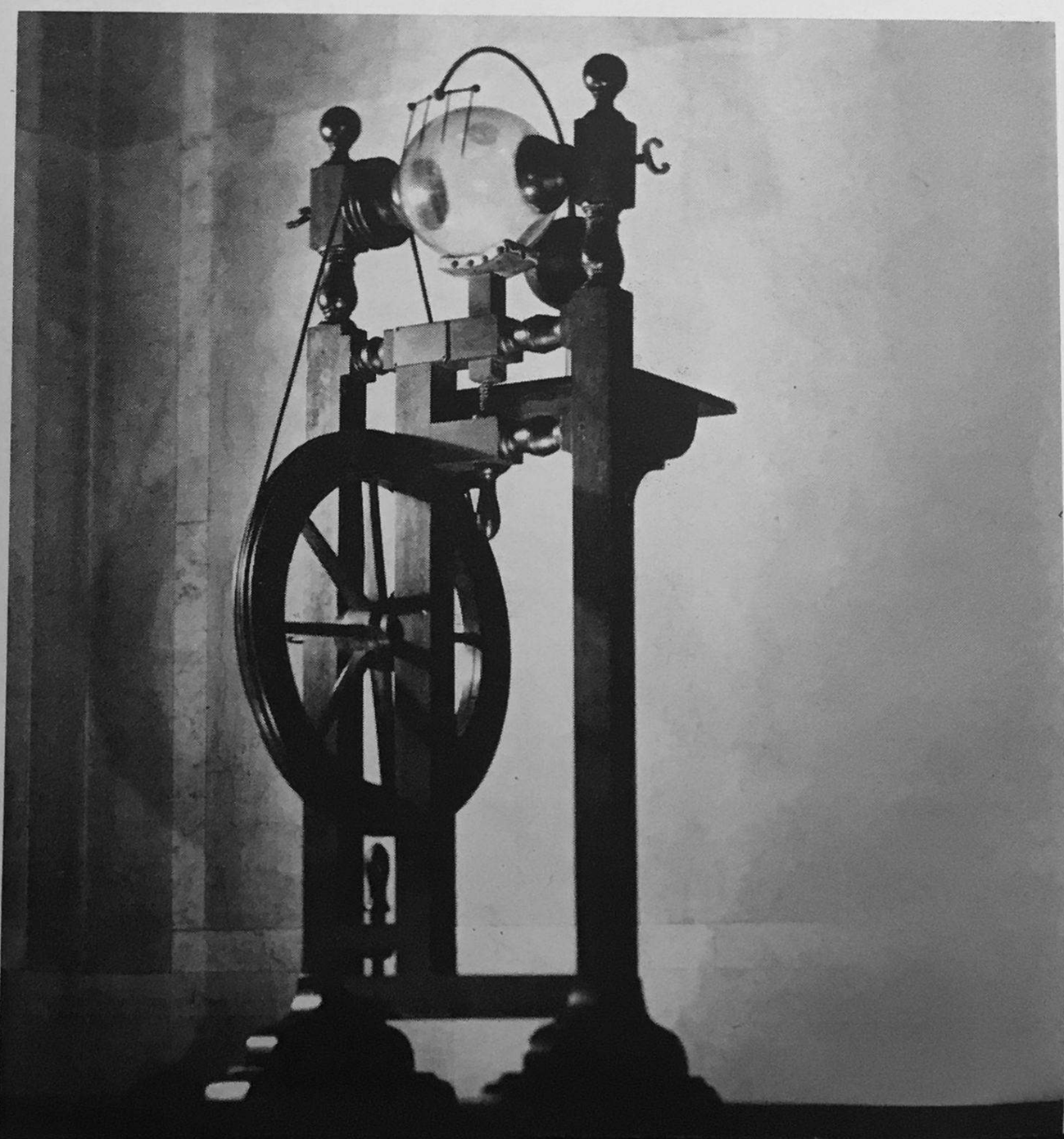
PHILADELPHIA:
Printed and ſold by *B. FRANKLIN*, at the New Printing-Office near the Market.

BENJAMIN FRANKLIN . . . INVENTOR

To regard Franklin as an inventor merely in the modern sense of the word is to belittle his stature. Though his work on electricity and bifocal spectacles is well-known, Franklin's interests were scientific in the widest sense. He drew up a chart of the Gulf Stream, introduced developments in medicine and meteorology, supported inoculation in face of public disapproval, and pioneered civic benefits such as street lighting and cleaning. He even found time to write on the cause and cure of smoky chimneys.



Franklin's electrical discoveries brought him acclaim. Convinced that lightning was electrical in character, he successfully conducted storm electricity to the earthbound end of a kite string, and so gave us the lightning conductor. Shown below is his famous electrical machine.

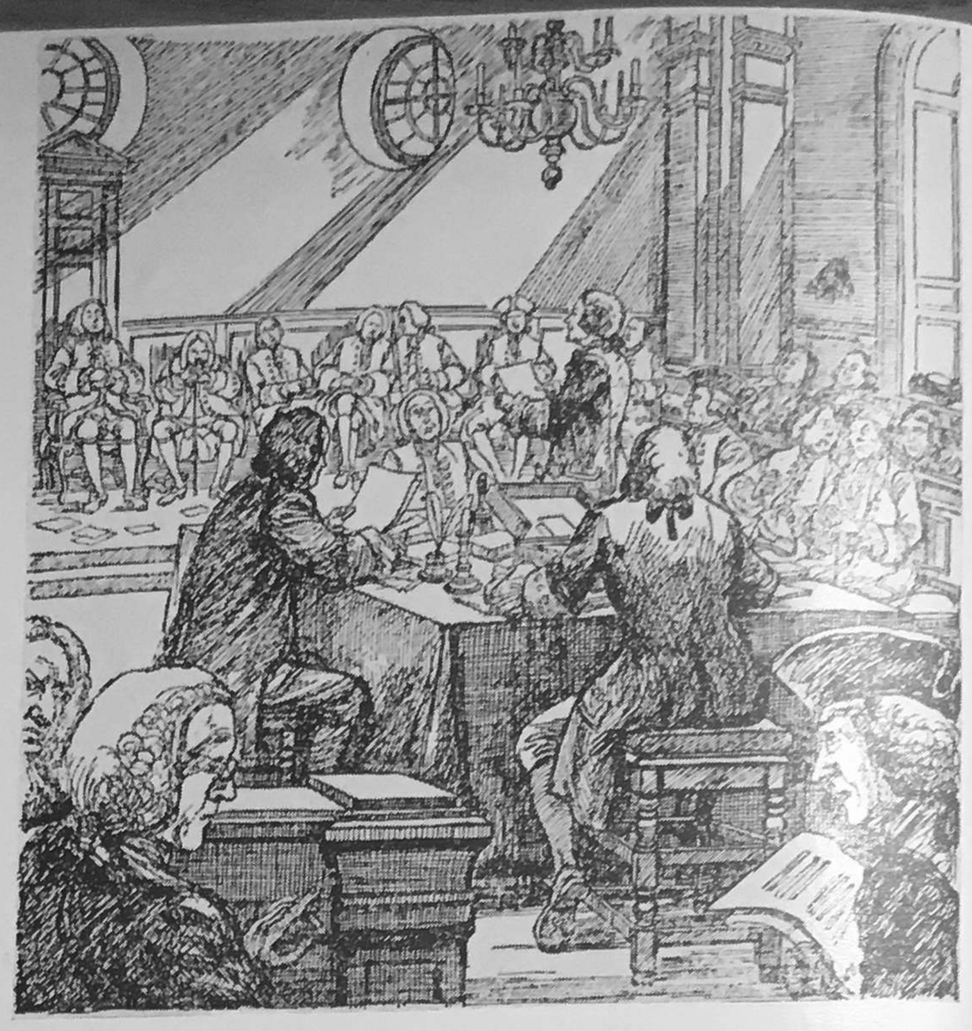


The armonica, invented by Franklin, comprised a number of glass bowls mounted on a spindle and turned by a treadle. Moistened finger-tips were applied to the turning bowls, producing sweet tones. Music for the instrument was written by Mozart.

Bifocal spectacles were among Franklin's many inventions. Made originally for his own use, they had lenses for near and far sight.

Franklin's iron fireplace was the first to make effective use of down-drafts. From it evolved the Pennsylvania fireplace, with a grate and sliding doors.

Forerunner of the tablet-armed chairs used today in classrooms and public places was Franklin's swivel-armed writing chair.



In 1736 Franklin was chosen Clerk of the General Assembly of Pennsylvania, a position which secured for him the business of printing for the Assembly. BELOW: *Franklin penned this strong letter to his close friend William Strahan, but later thought better of it and the letter was never sent.*

BENJAMIN FRANKLIN . . . STATESMAN

Franklin's reputation as a statesman is largely bound up with his successes as a representative of the American colonies to Britain and France. His efforts in fighting the unpopular Stamp Act were responsible for its eventual repeal, but not until stamp taxes had done irreparable harm to relations between Britain and her colonies. Franklin negotiated substantial loans from France, helped unify the American colonies, and was one of the signatories of the Declaration of Independence.

Philad.a July 5. 1775

Mr Strahan,

You are a Member of Parliament, and one of that Majority which has doomed my Country to Destruction.— —You have begun to burn our Towns, and murder our People. — Look upon your Hands! — They are stained with the Blood of your Relations! — You and I were long Friends: — You are now my Enemy, — and

I am,

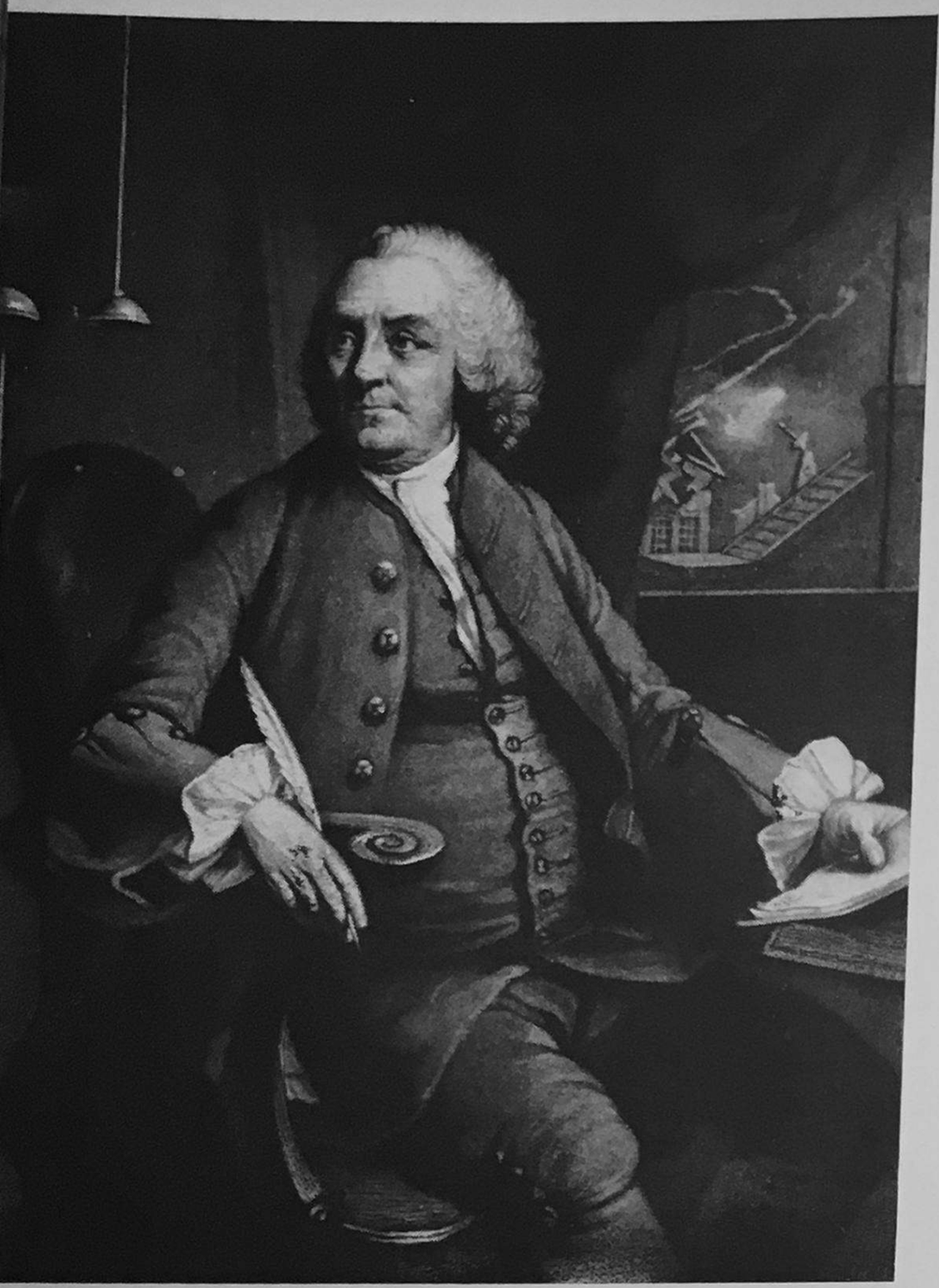
Yours,

B Franklin

On Aug. 2,1776, Benjamin Franklin and other leaders signed the Declaration of Independence. The 13 North American colonies were united, and British rule was severed.

The great French philosopher, Voltaire, wrote: "When I blessed the grandson (Temple) of the illustrious and wise Franklin, the man who, of all America, ought to be the most respected, I pronounced only these words: 'God and Liberty.' All those present shed tender tears."

After successful diplomatic negotiations in Europe, Franklin returned to Philadelphia in triumph in 1785.



On Early Marriages

YOU DESIRE, YOU SAY, my impartial thoughts on the subject of an early marriage, by way of answer to the numberless objections that have been made by numerous persons to your own. You may remember, when you consulted me on the occasion, that I thought youth on both sides to be no objection. Indeed, from the marriages that have fallen under my observation, I am rather inclined to think, that early ones stand the best chance of happiness. The temper and habits of the young are not yet become so stiff and uncomplying, as when more advanced in life; they form more easily to each other, and hence, many occasions of disgust are removed. And if youth has less of that prudence which is necessary to manage a family, yet the parents and elder friends of young married persons are generally at hand to afford their advice, which amply supplies that defect; and, by early marriage, youth is sooner formed to regular and useful life; and possibly some of those accidents or connexions, that might have injured the constitution, or reputation, or both, are thereby happily prevented. Particular circumstances of particular persons may possibly sometimes make it prudent to delay entering into that state: but, in general, when nature has rendered our bodies fit for it, the presumption is in nature's favor, that she has not judged amiss in making us desire it. Late marriages are often attended, too, with this further inconvenience, that there is not the same chance that the parents should live to see their offspring educated. "Late children," says the Spanish proverb, "are early orphans." A melancholy reflection to those whose case it may be. With us in America, marriages are generally in the morning of life; our children are therefore educated and settled in the world by noon; and thus, our business being done, we have an afternoon and evening of cheerful leisure to ourselves, such as our friend at present enjoys. By these early marriages we are blessed with more children; and from the mode among us, founded by nature, of every mother suckling and nursing her own child, more of them are raised. Thence the swift progress of population, unparalleled in Europe. In fine, I am glad you are married, and congratulate you most cordially upon it. You are now in the way of becoming a useful citizen; and you have escaped the unnatural state of celibacy for life—the fate of many here, who never intended it, but who having too long postponed the change of their conditions, find, at length, that it is too late to think of it, and so live all their lives in a situation that greatly lessens a man's value. An odd volume of a set of books bears not the value of its proportion to the set; what think you of the odd half of a pair of scissors; it can't well cut any thing; it may possibly serve to scrape a trencher.

Pray make my compliments and best wishes acceptable to your bride. I am old and heavy, or I should ere this have presented them in person. I shall make but small use of the old man's privilege, that of giving advice to younger friends. Treat your wife always with respect; it will procure respect to you, not only from her, but from all that observe it. Never use a slighting expression to her, even in jest; for slights in jest, after frequent bandyings, are apt to end in angry earnest. Be studious in your profession, and you will be learned. Be industrious and frugal, and you will be rich. Be sober and temperate, and you will be healthy. Be in general virtuous, and you will be happy. At least, you will, by such conduct, stand the best chance for such consequences. I pray God to bless you both! being ever your affectionate friend, B. FRANKLIN. ♦

Necessary hints

to those that would be rich

These intriguing instructions for "making money plenty" were light-heartedly penned by Franklin. He wrote, however, from a position of authority, for his financial ability enabled him to retire from active business at the early age of 42.

THE USE OF MONEY is all the advantage there is in having money. For six pounds a year you may have the use of one hundred pounds, provided you are a man of known prudence and honesty.

He that spends a groat a day idly, spends idly above six pounds a year, which is the price for the use of one hundred pounds.

He that wastes idly a groat's worth of his time per day, wastes the privilege of using one hundred pounds each day.

He that idly loses five shillings worth of time, loses five shillings, and might as prudently throw five shillings into the sea.

He that loses five shillings, not only loses that sum, but all the advantages that might be made by turning it in dealing; which, by the time that a young man becomes old, will amount to a considerable sum of money.

Again; he that sells upon credit, asks a price for what he sells equivalent to the principal and interest of his money for the time he is to be kept out of it; therefore, he that buys upon credit, pays interest for what he buys; and he that pays ready money, might let that money out to use; so that he that possesses any thing he has bought, pays interest for the use of it.

Yet, in buying goods, it is best to pay ready money, because he that sells upon credit, expects to lose five per cent by bad debts; therefore he charges, on all he sells upon credit, an advance that shall make up that deficiency.

Those who buy upon credit, pay their share of this advance.

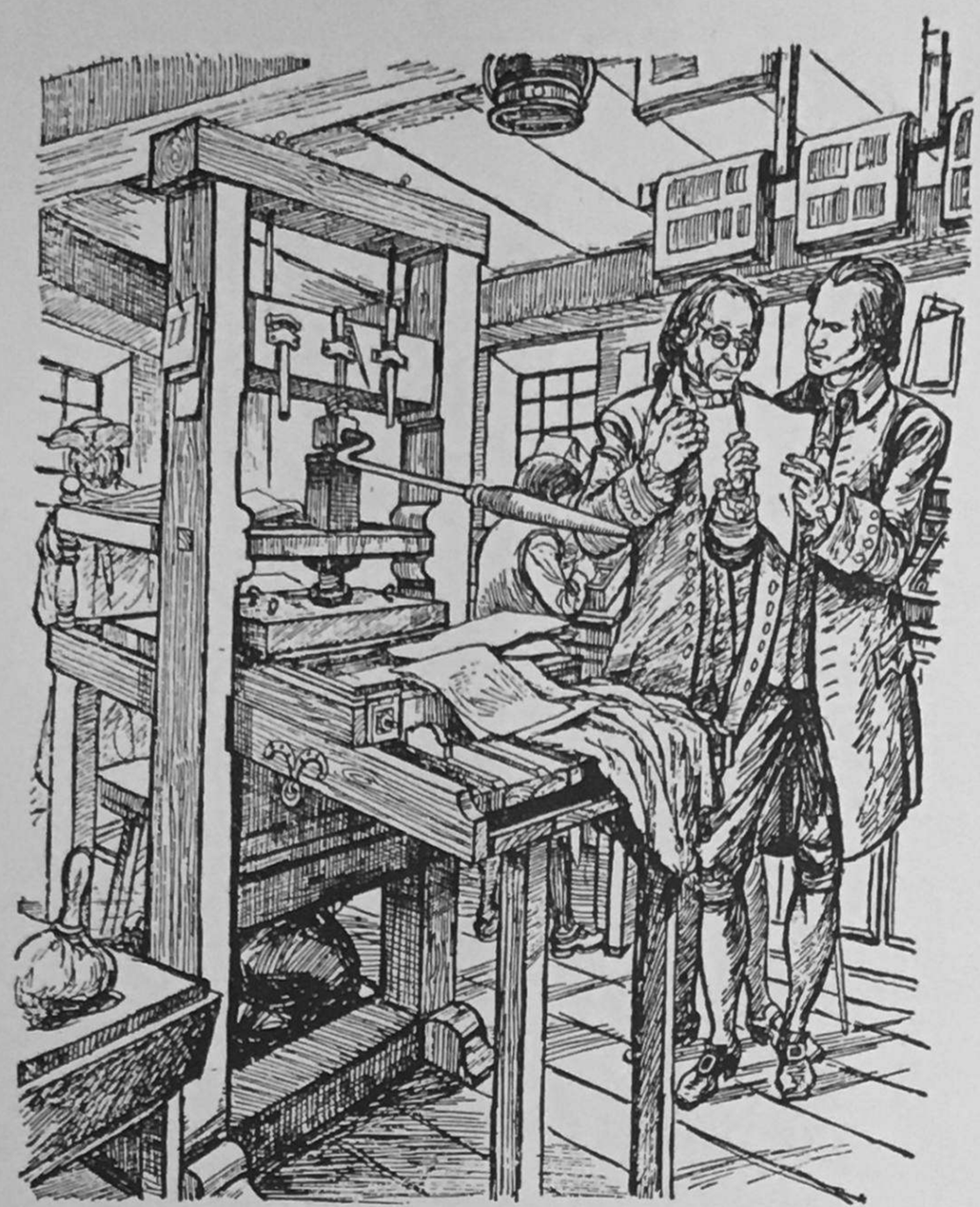
He that pays ready money escapes, or may escape, that charge.

A penny saved is twopence clear;
A pin a day's a groat a year.

At this time, when the general complaint is that—"money is scarce," it will be an act of kindness to inform the moneyless how they may reinforce their pockets. I will acquaint them with the true secret of money-catching—the certain way to fill empty purses—and how to keep them always full. Two simple rules, well observed, will do the business.

First, Let honesty and industry be thy constant companions; and, Secondly, Spend one penny less than thy clear gains.

Then shall thy hide-bound pocket soon begin to thrive, and will never again cry with the empty bellyache; neither will creditor insult thee, nor want oppress, nor hunger bite, nor nakedness freeze thee. The whole hemisphere will shine brighter, and pleasure spring up in every corner of thy heart. Now, therefore, embrace these rules and be happy. Banish the bleak winds of sorrow from thy mind, and live independent. Then shalt thou be a man, and not hide thy face at the approach of the rich, nor suffer the pain of feeling little when the sons of fortune walk at thy right hand: for independency, whether with little or much, is good fortune, and placeth thee on even ground with the proudest of the golden fleece. Oh, then, be wise, and let industry walk with thee in the morning, and attend thee until thou reachest the evening hour for rest. Let honesty be as the breath of thy soul, and never forget to have a penny, when all thy expenses are enumerated and paid: then shalt thou reach the point of happiness, and independence shall be thy shield and buckler, thy helmet and crown; then shall thy soul walk upright, nor stoop to the silken wretch because he hath riches, nor pocket an abuse because the hand which offers it wears a ring set with diamonds. ♦



Benjamin Franklin . . . ON THE FREEDOMS

BENJAMIN FRANKLIN BELIEVED that an essential service of man to his fellow man was the free communication of ideas. Without such communication, he felt, there could be no spread of wisdom, no elevation of man, no real freedom and no universal peace.

The preservation of this freedom was the central objective of Franklin's life. It never could be taken for granted. His first public act, at the age of 16, was to start fighting for freedom of speech and the press. His last public act, just before he died at 84, was an appeal for the emancipation of slaves, employment for freed Negroes and education of slave children.

In between these years, like a bright thread through all his varied activities, runs this great crusade for freedom of speech, freedom of the press, freedom in the exchange of scientific ideas—freedom of religion, education, private enterprise and opportunity, regardless of race, color, creed or class.

Because he was, above all else a practical man, Franklin backed his beliefs with *action*—not just words.

His first step for the freedoms he believed in was with the *New England Courant*. His brother James, the publisher, was thrown into jail for criticizing the British authorities in Boston. Young Benjamin, the apprentice, was named *Publisher* in a successful effort to save the paper.

With rare courage, he wrote under the pen name "Silence Dogood," expressing his sentiments in the *London Journal:*

> "Without freedom of thought, there can be no such thing as wisdom; and no such thing as public liberty without freedom of speech; which is the right of every man. . . . Whoever would overthrow the liberty of a nation must begin by subduing the freedom of speech. ."

In another Dogood article, written while still only 16, Franklin made this pledge; "I am. . . . a mortal enemy of arbitrary government and unlimited power . . . . I now take up a resolution to do for the future all that lies in my way for the service of my countrymen. . . ." And so started the great crusade which Mirabeau said "poured a

flood of light over all Europe . . . restrained alike thunderbolts and tyrants. . . . " and contributed to extending the rights of man.

Franklin believed that the Press had a great responsibility in maintaining these freedoms. He wrote, "The conductor of a newspaper should, methinks, consider himself as in some degree, the guardian of his country's reputation. . . . "

Knowing that even a little let-down might lead to growing censorship, he wrote one of his greatest appeals (*An Apology for Printers*) over the criticism of what had been said in a 5 shilling advertisement. In this enlightened appeal, Franklin first explained that "printers are educated in the belief that when men differ in opinion, both sides ought equally to have the advantage of being heard by the public; and that when truth and error have fair play, the former is always an overmatch for the latter."

He closed the *Apology* with these stirring words:

> "I consider the Variety of Humors among Men and despair of pleasing every Body: yet I shall not therefore leave off printing. I shall continue my business. I shall not burn my Press and melt my Letters."

Under the name *Poor Richard*, his frankness and courage appealed to the independent spirit of the Colonies. His *Pennsylvania Gazette* soon achieved the largest circulation and advertising volume of any paper in America. The famous *Poor Richard Almanack* and other *Gazettes* which he helped to sponsor in New York, Connecticut, Rhode Island, South Carolina and Antigua, were all successful. He was able to retire at 42 and devote the rest of his life to science and to the service he had pledged for his country.

One of the first and most important of these services was his successful mission to London to win repeal of the hated *Stamp Act*. This Act, passed by Parliament in 1765, provided for a stamp duty on documents, books, newsprint and other items. It threatened the entire existence of the Free Press. Newspapers appeared with mourning borders, skull and crossbones.

Benjamin Franklin appeared before the House of Commons to oppose this duty. He was joined by Pitt and Burke. Repeal was won and the Press made free to start its miraculous growth and service to the people. That was only one phase of the long crusade for Freedoms so dearly prized today.

Stung by the prejudices that existed against Jews and Catholics in a land partly settled by fugitives from other religious persecution, the Presbyterian Franklin recommended to the Pope, when the Church of England would not delegate authority to an American (rebel) divine, the appointment of his friend, John Carroll, to be the first Catholic Bishop in America. His name headed the list of donors to the Congregation Mikveh Israel in 1788.

When Whitfield, the evangelist, came to Philadelphia, and the regular clergy refused to grant him permission to use their pulpits, Franklin lent his aid to buying ground and building a house, "Expressly for the use of any preacher of any religious persuasion who might desire to say something to the people. . . . So that even if the Mufti of Constantinople were to send a missionary to preach Mohammedanism to us, he would find a pulpit at his service."

One of the most brilliant of his crusades was in the field of education. Seeing the unfairness of the domination by family and wealth of the colleges of his day, Franklin proposed a new kind of school (that later became the University of Pennsylvania). He advocated education for everyone in his chosen field, regardless of wealth, family or position. He even proposed practical education for women—one of the most revolutionary thoughts of his time.

Franklin was equally insistent that the exchange of scientific thought must be kept free from prejudice and persecution. In a remarkable letter on the theory of light waves from the sun, he wrote to Cadwallader Colden (April 23, 1752):

> "It is well we are not, as poor Galileo was, subject to the Inquisition for philosophical heresy. My whispers . . . . would be dangerous; but your writing and printing would be highly criminal. As it is, you must expect some censure. . . . "

Even then he resented the attempts of some scientists to hide their thoughts in a jargon of big words that were little understood by the public. In presenting his theory of waterspouts and whirlwinds, to John Perkins 1753, he said:

> "If my hypothesis is not the truth it is at least as naked. For I have not with some of our learned moderns, disguis'd my nonsense in Greek, clothed it in algebra or adorned it with fluxions. You have it in *puris naturablis*."

Part of Franklin's great success as a diplomat came from the fact that he followed the same principles of free and open communications in international relations.

In an age when diplomatic conversations were highly secret, heavily censored and almost never conducted in public, Franklin spoke openly to the press and to the people. John Adams said of his mission in France:

> ". . . . there (is) scarcely a peasant or a citizen, a *valet de chambre*, coachman or footman, a lady's chambermaid or a scullion in the kitchen who . . . . (does) not consider him as a friend to human kind . . . . they (seem) to think he (is) to restore the golden age."

Franklin's sincere belief in the wisdom of informing the public freely and frankly, was strikingly illustrated in the founding of America's first public hospital.

Dr. Thomas Bond, who conceived the idea, had tried and failed to raise the money. He came to Benjamin Franklin, as many did in those days. Franklin tells the story of success in his Autobiography:

> "Previously to the solicitation, I endeavored to prepare the minds of the people by writing on the subject in the newspapers, which was my usual custom in such cases, but which he (Dr. Bond) had omitted."

Because he believed so passionately in the right of every individual to think, speak, write and work as he wished, so long as he did not harm others, Franklin successfully taught *equality*. It was therefore only natural that he should have taken part in the creation and passage of those two great Documents (*The Declaration of Independence* and *The Constitution*) which defined those freedoms, for a startled world to see—to fear—and then endorse.

In the last speech of his life, before the Constitutional Convention, Franklin said, "Most men, indeed, as well as most sects in religion think themselves in possession of all truth. . . . But though many private persons think almost as highly of their infallibility as of that of their sect, few express it so naturally as a certain French lady who in a dispute with her sister said: 'I don't know how it happens, sister, but I meet with nobody but myself that's always in the right.'"

A year before he died, when the French revolutionary movement had started, he wrote, "God grant that not only the love of liberty but a thorough knowledge of the rights of man may pervade all the nations of the earth so that a philosopher may set his foot anywhere on its surface and say: 'This is my country'." ♦

BENJAMIN FRANKLIN...

THE FIRST MR. AMERICAN

Among the various functions of The Junto, organized by Franklin as "a club for mutual improvement" was the exchange of members' books. Thus originated the idea on which America's first public subscription library was based.

BENJAMIN FRANKLIN ONCE SAID, "Lost time is never found again; and that we call Time enough, always proves little enough."

To America's "Big Ben," time was the most precious commodity in the world. He was a frugal, thrifty man by nature who abhorred waste in any form. But most of all, he hated the waste of human potentialities. He believed particularly that youth possessed a great quality frequently lost to maturity—the quality of curiosity, with the added virtue of boundless energy and the faith to perform great deeds. By the time he was sixteen, Franklin had written some of his most powerful articles on politics, religious and racial tolerance, and had shown to the world a social consciousness lacking in most men many years his senior.

At that early age, he wrote the creed by which he was to live out the glory of his long and eventful life . . . "I now take up a resolution, to do all that *lies in my way* for the service of my countrymen."

Nothing in the world about him was too slight or insignificant to excite his interest. He believed with Emerson that "Imagination is not a talent of some men but is the health of every man." And Franklin was abundantly rich in health of this kind.

We are all too prone to think only of Benjamin Franklin in terms of the scientist who, as Turgot expressed it, "snatched the lightning from the skies and the sceptre from the hands of tyrants." As a scientist and statesman, he was esteemed in many countries. But Franklin made many other priceless contributions to mankind.

As a boy, he had dreamed, as many another has done, of going to sea. But, being the youngest son in the large family of a tallow chandler, he was early apprenticed to his brother James, in the latter's publishing house in Boston.

By the time he was seventeen, the ambitious young Ben set out to make his fortune in the only business he knew—that of printer. It is interesting to note that throughout his varied career as scientist, diplomat, printer, musician, philanthropist, philosopher,

printing remained his truest love. He chose to begin his will with these words, "I, Benjamin Franklin, Printer, late Minister Plenipotentiary from the United States of America to the Court of France, now President of Pennsylvania . . . "

After five years with his brother in Boston, Franklin travelled to Philadelphia, arriving with only a few coins in his pocket but a whole new world of interest spread before him. Perhaps one of his greatest qualities was that of simplicity. He tasted life and liked its savour. Franklin was, above all, a very human man. He loved people. He had a passion for peace. He enjoyed friends and revelled in a vigorous exchange of ideas. Famous for his wit, he has been called *the philosopher with a twinkle in his eye.* Yet the smallest things brought him pleasure. He once wrote, "I . . . think happiness consists more in small conveniences or pleasures that occur every day than in great pieces of good fortune that happen but seldom to a man in the course of his life. Thus I reckon it among my felicities that I can set my own razor and shave myself perfectly well; in which I have a daily pleasure."

Franklin is acclaimed as the real father of philanthropy in the new world. He was years ahead of his time in the vision and foresight he showed for his fellow countrymen. He, with his good friend Dr. Thomas Bond, founded the great public hospital system with the establishment of the Pennsylvania Hospital in Philadelphia; to him goes the credit for starting the first fire company; the first fire insurance company to the end that the many would share the losses of the few; the first subscription library; the first Academy in Pennsylvania which later became the University of Pennsylvania; he helped develop the postal system for the Colonies; strove for legislation to grant aid to widows and spinsters; fought for equal education for all and strongly advocated the abolition of slavery.

His inventions include the lightning rod for the protection of buildings against electric storms; the first efficient woodburning stove, still known as the *Franklin stove;* the draft for fireplaces to prevent smoking; a letter copying-press; a laundry mangle and bifocal glasses. But he never owned a patent, believing that "as we enjoy great advantages from the inventions of others, we should be glad of an opportunity to serve others by an invention of ours, and this we should do freely and generously."

Probably one of his most far-reaching inventions is the bifocal spectacles. It is impossible to estimate the vast increase in the working life span of men and women that this one "brain-child" of Franklin has given to the world.

He also made outstanding contributions in the field of medicine with his invention of a flexible catheter; in his studies on lead poisoning and on the treatment of paralysis with electricity. He pondered the study of evaporation as an aid to cooling and made a notable experiment with John Hadley of Cambridge University in 1758 where by using ether on the ball of Hadley's thermometer, they got the temperature down to 25 degrees below freezing.

But never did Benjamin Franklin lose his interest in the sea. He was a pioneer in the practical study of weather; he studied and charted the Gulf Stream from information as to "the dimensions, course and swiftness of the stream" which he received from Timothy Folger, a Nantucket whaler and kinsman of Franklin's. This enabled the shipping lanes to be shortened between America and England.

While visiting Holland with his good friend Sir John Pringle, he experimented with theories on the depths of canals, to help engineers reckon the depth at which canals could function most efficiently.

In 1753, the *Argo*, commanded by Captain Charles Swaine, left Philadelphia on the first voyage from the Colonies into the frigid waters of the Arctic.

Benjamin Franklin helped organize this expedition in hopes of finding the Northwest Passage.

Another theory which Franklin propounded was that, if lost at sea, thirst could be alleviated by immersing the body (or even the clothing) in water frequently, that the pores would absorb a certain amount of water, but reject the salt.

When nearly at the end of his life, he suggested the idea of water-tight compartments to add to the safety of ocean travel.

Self-educated after the age of ten, Franklin taught himself a workable knowledge of French, Spanish, Italian, and Latin, became graceful in the manners of diplomacy and served both as an agent of the province of Pennsylvania (and later several other colonies also) at the English court. Later he served his country as Minister Plenipotentiary to France.

Yet he had time for friendships with the great men of his era—in science, in politics, in letters. He loved music all of his life, played the harp, guitar and violin and made a delightful contribution to the music of the times with his invention of the *Armonica*, a sweet-toned instrument fashioned somewhat after the musical glasses so popular in Europe.

Poor Richard's Almanack was one of his most successful business ventures. Tongue in cheek, Franklin, with great good humor, conceived the idea of building its circulation by a campaign against a rival publisher by predicting the date of his competitor's death.

It has often been said that no man in the history of the American Colonies had so much genius to offer to the world, in so many fields.

Benjamin Franklin was a man of peace, yet he had a vital part in making us a free nation. He organized the first militia in Pennsylvania and raised the money for warships in the Colonies.

It was he who recommended von Steuben and Lafayette to the attention of General Washington. While carrying out his duties as Minister Plenipotentiary to France, he received promises from the French Foreign Minister Vergennes of outfitting John Paul Jones, who later named the famous *Bonhomme Richard* in his honor. In addition to acting as Ambassador to France, he frequently served as banker, consul, merchant, naval director, judge of admiralty and intermediary on prisoners.

He was a man of tolerance of whom the great French Ambassador, Jules Jusserand said, "He taught us something we shall never forget . . . that no man should have a better chance in this world because he happened to be born in some certain caste or class."

Franklin believed passionately in the rights of the individual and the dignity of man; believed "that without freedom of thought, there can be no such thing as wisdom; and no such thing as public liberty without freedom of speech; which is the right of every man. . . . Whoever would overthrow the liberty of a nation must begin by subduing the freedom of speech."

"Fear to do ill, and you need fear nought else," he once wrote. And again, "We may make these times better if we bestir ourselves." In these two quotations from his own writings is embodied much of the philosophy of the first Mr. American—the only man to sign *all four* of the documents on which our United States was founded, the Declaration of Independence, the treaty of alliance with France, the treaty of peace with England and the Constitution of the United States of America. ♦

BENJAMIN FRANKLIN AND BUSINESS

BUSINESS LIFE began for Franklin at the early age of ten years, when he was taken from school and put to work in his father's shop. At the age of 17, he scored his first business success by profitably managing his brother's *New England Courant.* Having learned the technique of a good craftsman from his London-taught brother, Franklin ran away before his apprentice term was served and worked for Keimer's printing house in Philadelphia. From there he went to London where he worked a year.

Next he returned to Philadelphia to take a position with Denham's general store. But Denham soon died and Franklin, who had just turned 21, was out of a job. He went back to his old employer, Keimer, and aided in a job of printing paper money. The paper money printing job brought about Franklin's contrivance of a copperplate press, the first that had appeared in the country. After several more years gaining knowledge and experience in the printing business, Franklin published the *Pennsylvania Gazette* in 1729. This was soon known as the most readable paper in Colonial America and the spirited writing of the publisher aroused the comment and attention of the leading citizens of Philadelphia, while subscriptions and advertising continued to pour in to make the business increasingly profitable.

During the paper money controversy in Pennsylvania, Franklin's writings in favor of paper money influenced the vote, and as a result of his aid, he was given the job of printing the money. Soon he opened a small stationery shop. In 1732, he began the publication of *Poor Richard's Almanack* which sold widely in yearly issues for twenty-five years, and exerted a powerful influence on the American way of life. He saw that America was a new country, a pioneer country, and the only way for Americans to get along was to work hard and save their money. The frontier was no place for idlers or spendthrifts; such people could not create a healthy united nation.

His business prospered through the influence of the *Pennsylvania Gazette* and in 1736 he was appointed Clerk of the General Assembly, which also had business value. Besides the pay for the immediate services as clerk, the place gave him better opportunity of keeping up an interest among the members, which secured him the business of printing the votes, laws, paper money and other occasional jobs for the public that were quite profitable.

Franklin entered into a partnership with David Hall in 1748 and the arrangement continued satisfactorily for 18 years. A reasonable estimate has placed Franklin's income at the time of his partnership at about 1000 pounds a year. He was also the owner of a considerable amount of land. At the end of 20 years, Franklin was able to retire.

Foremost in Franklin's business policy was the adherence to industry and frugality. These were the keys to success, which he believed he proved. One biographer has noted in Franklin's writings, 73 repetitions of the two words, *industry* and *frugality*.

Over and over again in his *Almanack*, he praised these qualities and all the virtues of true democracy with irresistible wit and charm; and his sayings have come down to us as proverbs. Sayings such as, "Early to bed, early to rise, makes a man healthy, wealthy and wise," "A cat in gloves catches no mice," "The used key is always bright," "Three moves are as bad as a fire." As Franklin said: "I endeavor'd to make my *Almanack* both entertaining and useful. . . . A proper vehicle for conveying instruction among the people, such as inculcated *industry* and *frugality*, as the means of procuring wealth, and thereby securing virtue . . . And it accordingly came to be in such demand, that I reap'd considerable profit from it."

Franklin believed that success depended on appearances as well as reality. He took care not only to be industrious in reality, but to look the part. To show that he was about his business, he sometimes brought home the paper he purchased at the store in a wheelbarrow.

In illustrating Franklin's tactics in business, it is interesting to note his reaction to a rival's unfair practice. Bradford, printer of a competitive newspaper and Postmaster of Philadelphia, would not allow Franklin's *Pennsylvania Gazette* to go through the mails. When Franklin succeeded Bradford as Postmaster, however, he did not seek revenge. He said, "I thought so meanly of him for it, that, when I came into his situation, I took care not to imitate it."

Following his retirement from active business, Franklin received about 500 pounds a year for 18 years from his partnership with Hall. The office of Postmaster of Philadelphia brought him a small salary and he received something from his invested savings and 300 pounds as Deputy Postmaster-General for America. He also received amounts varying from 100 to 500 pounds a year for office as Colonial Agent for several States. At the close of his office as Deputy Postmaster-General, all these agencies and salaries attached to them came to an end.

When he returned from England in 1775, he was appointed Postmaster-General of the United States at 1000 pounds a year. For his public services in France he received 500 pounds a year and expenses, the amount being increased to 2500 pounds a year when his rank was advanced to that of Minister.

At his death, his entire estate was supposed to be between $200,000 and $250,000.

Franklin has been called an *Apostle of Private Enterprise*. But he also believed that success in such enterprise carried with it the obligation to help those who were less fortunate through no fault of their own. It was in this belief that he founded America's first fire insurance company and first public hospital, advocated life insurance to care for widows, suggested crop insurance for farmers against loss by drought, hurricane and storm, old age pensions, and public service as a public duty.

His was the finest type of individual enterprise and individual responsibility to his fellow man. ♦

ON BEING HAPPY

THERE ARE TWO SORTS OF PEOPLE in the world, who, with equal degrees of health and wealth, and the other comforts of life become, the one happy, and the other miserable. This arises very much from the different views in which they consider things, persons, and events; and the effect of those views upon their own minds.

In whatever situation men can be placed, they may find conveniences and inconveniences; in whatever company, they may find persons and conversation more or less pleasing: at whatever table, they may meet with meats and drinks of better and worse taste, dishes better and worse dressed: in whatever climate, they will find good and bad weather: under whatever government, they may find good and bad laws, and good and bad administration of those laws: in whatever poem, or work of genius, they may see faults and beauties: in almost every face, and every person, they may discover fine features and defects, good and bad qualities.

Under these circumstances, the two sorts of people above mentioned fix their attention; those who are disposed to be happy, on the conveniences of things, the pleasant parts of conversation, the well-dressed dishes, the goodness of the wines, the fine weather, etc. and enjoy all with cheerfulness. Those who are to be unhappy, think and speak only of the contraries. Hence they are continually discontented themselves, and, by their remarks, sour the pleasures of society; offend personally many people, and make themselves every where disagreeable. If this turn of mind was founded in nature, such unhappy persons would be the more to be pitied. But as the disposition to criticize, and to be disgusted, is perhaps, taken up originally by imitation, and is, unawares, grown into a habit, which, though at present strong, may nevertheless be cured, when those who have it are convinced of its bad effect on their felicity; I hope this little admonition may be of service to them, and put them on changing a habit, which, though in the exercise it is chiefly an act of imagination, yet it has serious consequences in life, as it brings on real griefs and misfortunes. For as many as are offended by, and nobody loves, this sort of people; no one shows them more than the most common civility and respect, and scarcely that; and this frequently puts them out of humor.

An old philosophical friend of mine was grown, from experience, very cautious in this particular, and carefully avoided any intimacy with such people. He had, like other philosophers, a thermometer to show him the heat of the weather; and a barometer to mark when it was likely to prove good or bad; but there being no instrument invented to discover, at first sight, this unpleasing disposition in a person, he, for that purpose, made use of his legs: one of which was remarkably handsome; the other, by some accident, crooked and deformed. If a stranger, at first interview, regarded his ugly leg more than his handsome one, he doubted him. If he spoke of it, and took no notice of the handsome leg, that was sufficient to determine my philosopher to have no further acquaintance with him. Every body has not this two-legged instrument; but every one, with a little attention, may observe signs of that carping, fault-finding disposition, and take the same resolution of avoiding the acquaintance of those infected with it. I therefore advise those critical, querulous, discontented, unhappy people, if they wish to be respected and beloved by others, and happy in themselves, they should *leave off looking at the ugly leg.* ♦

ADVICE TO A YOUNG BUSINESSMAN

REMEMBER that *time* is money. He that can earn ten shillings a day by his labor, and goes abroad, or sits idle one half of that day, though he spends but sixpence during his diversion or idleness, ought not to reckon *that* the only expense; he has really spent, or rather thrown away, five shillings besides.

Remember that *credit* is money. If a man lets his money lie in my hands after it is due, he gives me the interest, or so much as I can make of it during that time. This amounts to a considerable sum where a man has good and large credit, and makes good use of it.

Remember that money is of a prolific generating nature. Money can beget money, and its offspring can beget more, and so on. Five shillings turned is six; turned again it is seven and threepence; and so on till it becomes a hundred pounds. The more there is of it, the more it produces every turning, so that the profits rise quicker and quicker. He that kills a breeding sow, destroys all her offspring to the thousandth generation. He that murders a crown, destroys all that it might have produced, even scores of pounds.

Remember that six pounds a year is but a groat a day. For this little sum (which may be daily wasted either in time or expense, unperceived,) a man of credit may, on his own security, have the constant possession and use of a hundred pounds. So much in stock, briskly turned by an industrious man, produces great advantage.

Remember this saying: "The good paymaster is lord of another man's purse." He that is known to pay punctually and exactly to the time he promises, may, at any time and on any occasion, raise all the money his friends can spare. This is sometimes of great use. After industry and frugality, nothing contributes more to the raising a young man in the world, than punctuality and justice in all his dealings: therefore never keep borrowed money an hour beyond the time you promised, lest a disappointment shut up your friend's purse for ever.

The most trifling actions that affect a man's credit are to be regarded. The sound of your hammer at five in the morning, or nine at night, heard by a creditor, makes him easy six months longer; but if he sees you at a billiard-table, or hears your voice at a tavern, when you should be at work, he sends for his money the next day; demands it before he can receive it in a lump.

It shows, besides, that you are mindful of what you owe; it makes you appear careful as well as honest, and that increases your credit.

Beware of thinking all your own that you possess, and of living accordingly. It is a mistake that many people who have credit fall into. To prevent this, keep an exact account, for some time, both of your expenses and your income. If you take the pains at first to mention particulars, it will have this good effect; you will discover how wonderfully small trifling expenses mount up to large sums, and will discern what might have been, and may for the future be saved, without occasioning any great inconvenience.

In short, the way to wealth, if you desire it, is as plain as the way to market. It depends chiefly on two words, *industry* and *frugality;* that is, waste neither *time* nor *money*, but make the best use of both. Without industry and frugality nothing will do, and with them every thing. He that gets all he can honestly, and saves all he gets (necessary expenses excepted,) will certainly become rich—if that Being, to whom all should look for a blessing on their honest endeavors, doth not in His wise providence otherwise determine. ♦

THE ART OF HAVING

by Benjamin Franklin

As a great part of our life is spent in sleep, during which we have sometimes pleasing and sometimes painful dreams, it becomes of some consequence to obtain the one kind, and avoid the other; for whether real or imaginary, pain is pain, and pleasure is pleasure. If we can sleep without dreaming, it is well that painful dreams are avoided. If, while we sleep, we can have any pleasing dreams, it is, as the French say, *tant gagné*, so much added to the pleasure of life.

To this end it is, in the first place, necessary to be careful in preserving health, by due exercise and great temperance; for, in sickness, the imagination is disturbed; and disagreeable, sometimes terrible, ideas are apt to present themselves. Exercise should precede meals, not immediately follow them: the first promotes, the latter, unless moderate, obstructs digestion. If after exercise we feed sparingly, the digestion will be easy and good, the body lightsome, the temper cheerful, and all the animal functions performed agreeably. Sleep, when it follows, will be natural and undisturbed. Indolence, with full feeding, occasions nightmares and horrors inexpressible: we fall from precipices, are assaulted by wild beasts, murderers, and demons, and experience every variety of distress. Observe, however, that the quantities of food and exercise are relative things: those who move much may, and indeed ought, to eat more; those who use little exercise, should eat little. In general, mankind, since the improvement of cookery, eat about twice as much as nature requires. Suppers are not bad, if we have not dined; but restless nights naturally follow hearty suppers, after full dinners. Indeed, as there is a difference in constitutions, some will rest after these meals; it costs them only a frightful dream and an apoplexy, after which they sleep till doomsday. Nothing is more common in the newspapers, than instances of people, who, after eating a hearty supper, are found dead abed in the morning.

Another means of preserving health, to be attended to, is the having a constant supply of fresh air in your bed-chamber. It has been a great mistake, the sleeping in rooms exactly closed, and in beds surrounded by curtains. No outward air, that may come into you, is so unwholesome as the unchanged air, often breathed, of a close chamber. As boiling water does not grow hotter by longer boiling, if the particles that receive greater heat can escape; so living bodies do not putrefy, if the particles, as fast as they become putrid, can be thrown off. Nature expels them by the pores of the skin and lungs, and in a free open air, they are carried off; but, in a close room, we receive them again and again, though they become more and more corrupt. A number of persons crowded into a small room, thus spoil the air in a few minutes, and even render it mortal, as in the Black Hole at Calcutta. A single person is said only to spoil a gallon of air per minute, and therefore requires a longer time to spoil a chamberful; but it is done, however, in proportion, and many putrid disorders have hence their origin. It is recorded of Methusalem, who, being the longest liver, may be supposed to have best preserved his health, that he slept always in the open air; for, when he had lived five hundred years, an angel said to him, "Arise, Methusalem, and build thee a house, for thou shalt live yet five hundred years longer." But Methusalem answered and said; "If I am to live but five hundred years longer, it is not worth while to build me a house—I will sleep in the air as I have been used to do." Physicians, after having for ages contended that the sick should not be indulged with fresh air, have at length discovered that it may do them good. It is therefore to be hoped, that they may in time discover likewise, that it is not hurtful to those who are in health; and that we may then be cured of the *aerophobia* that at present distresses weak minds, and makes them choose to be stifled and poisoned.

Confined air, when saturated with perspirable matter, will not receive more: and that matter must remain in our bodies, and occasion diseases: but it gives some previous notice of its being about to be hurtful, by producing certain uneasiness, slight, indeed at first, such as, with regard to the lungs is a trifling sensation, and to the pores of the skin a kind of restlessness which is difficult to describe, and few that feel it know the cause of it. But we may recollect, that sometimes, on waking in the night, we have, if warmly covered, found it difficult to get to sleep again. We turn often, without finding repose in any position. This fidgetiness, to use a vulgar expression for want of a better, is occasioned wholly

PLEASANT DREAMS

by an uneasiness in the skin, owing to the retention of the perspirable matter—the bedclothes having received their quantity, and, being saturated, refusing to take any more. To become sensible of this by an experiment, let a person keep his position in the bed, but throw off the bedclothes, and suffer fresh air to approach the part uncovered of his body; he will then feel that part suddenly refreshed; for the air will immediately relieve the skin, by receiving, licking up, and carrying off, the load of perspirable matter that incommoded it. For every portion of cool air that approaches the warm skin, in receiving its part of that vapor, receives therewith a degree of heat, that rarefies and renders it lighter, when it will be pushed away, with its burden, by cooler and therefore heavier fresh air; which, for a moment, supplies its place, and then, being likewise changed, and warmed, gives way to a succeeding quantity. This is the order of nature, to prevent animals being infected by their own perspiration. He will now be sensible of the difference between the part exposed to the air, and that which, remaining sunk in the bed, denies the air access; for this part now manifests its uneasiness more distinctly by the comparison, and the seat of the uneasiness is more plainly perceived than when the whole surface of the body was affected by it.

Here then is one great and general cause of unpleasing dreams. For when the body is uneasy, the mind will be disturbed by it, and disagreeable ideas of various kinds will, in sleep, be the natural consequences. The remedies, preventive and curative, follow:

1. By eating moderately (as before advised for health's sake) less perspirable matter is produced in a given time; hence the bedclothes receive it longer before they are saturated; and we may, therefore, sleep longer, before we are made uneasy by their refusing to receive any more.

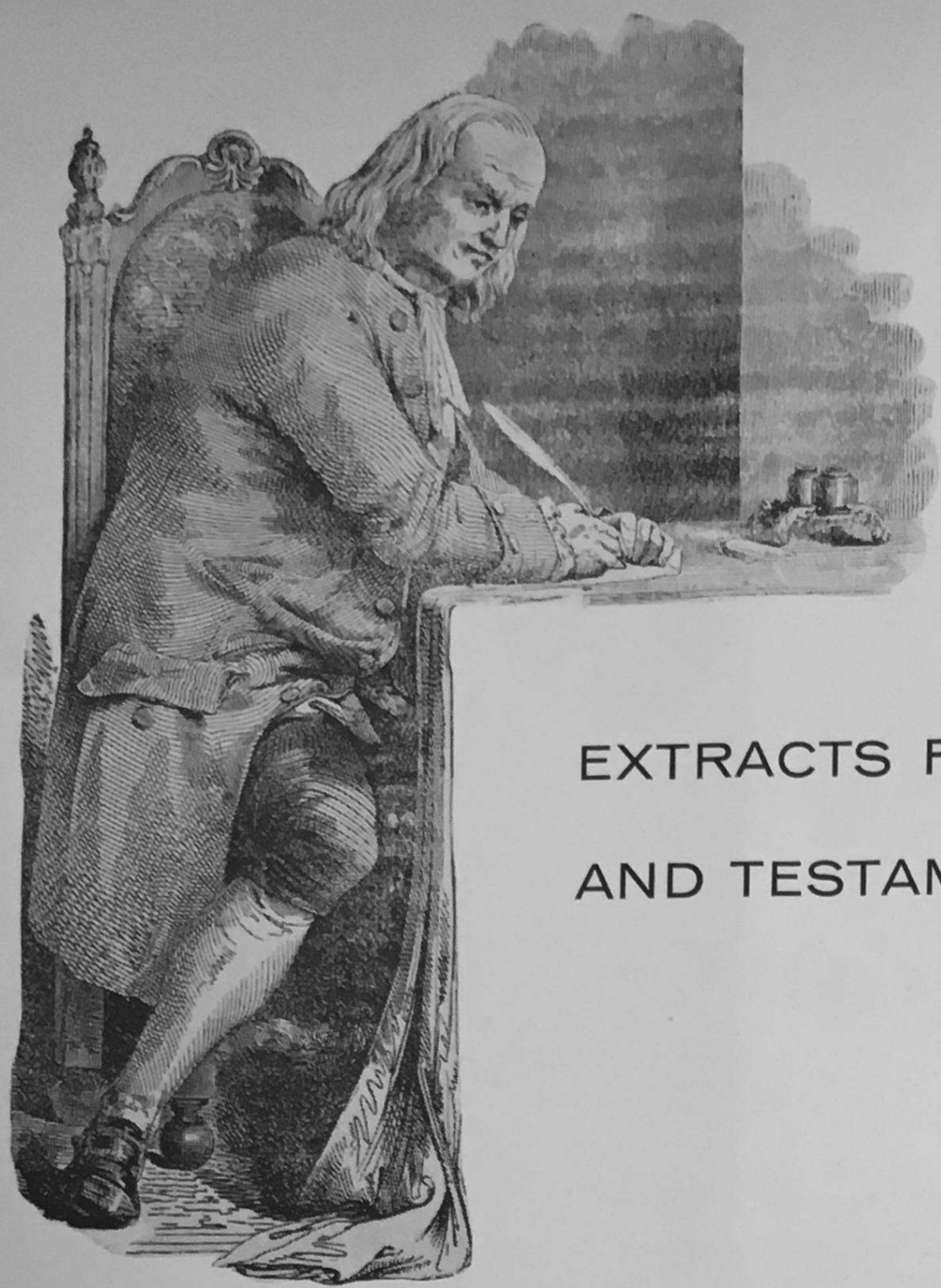
2. By using thinner and more porous bedclothes, which will suffer the perspirable matter more easily to pass through them, we are less incommoded, such being longer tolerable.

3. When you are awakened by this uneasiness, and find you cannot easily sleep again, get out of bed, beat up and turn your pillow, shake the bedclothes well, with at least twenty shakes, then throw the bed open, and leave it to cool; in the meanwhile, continuing undrest, walk about your chamber, till your skin has had time to discharge its load, which it will do sooner as the air may be drier and colder. When you begin to feel the cold air unpleasant, then return to your bed; and you will soon fall asleep, and your sleep will be sweet and pleasant. All the scenes presented to your fancy will be of the pleasing kind. I am often as agreeably entertained with them, as by the scenery of an opera. If you happen to be too indolent to get out of bed, you may, instead of it, lift up your bedclothes with one arm and leg, so as to draw in a good deal of fresh air, and by letting them fall, force it out again; this, repeated twenty times, will so clear them of the perspirable matter they have imbibed, as to permit your sleeping well for some time afterwards.

Those who do not love trouble, and can afford to have two beds, will find great luxury in rising, when they wake in a hot bed, and going into the cold one. Such shifting of beds would also be of great service to persons ill of a fever, as it refreshes and frequently procures sleep. A very large bed, that will admit a removal so distant from the first situation as to be cool and sweet, may in a degree answer the same end.

One or two observations more will conclude this little piece. Care must be taken, when you lie down, to dispose your pillow so as to suit your manner of placing your head, and to be perfectly easy; then place your limbs so as not to bear inconveniently hard upon one another; as for instance, the joints of your ankles: for though a bad position may at first give but little pain, and be hardly noticed, yet a continuance will render it less tolerable, and the uneasiness may come on while you are asleep, and disturb your imagination.

These are the rules of the art. But though they will generally prove effectual in producing the end intended, there is a case in which the most punctual observance of them will be totally fruitless. I need not mention the case to you, my dear friend: but my account of the art would be imperfect without it. The case is, when the person who desires to have pleasant dreams has not taken care to preserve, what is necessary, above all things—A GOOD CONSCIENCE. ♦



EXTRACTS FROM THE LAST WILL AND TESTAMENT OF DR. FRANKLIN

WITH REGARD TO MY BOOKS, those I had in France, and those I left in Philadelphia, being now assembled together here, and a catalogue made of them, it is my intention to dispose of the same in the manner following:

My *History of the Academy of Sciences*, in sixty or seventy volumes quarto, I give to the Philosophical Society of Philadelphia, of which I have the honor to be president. My collection in folio of *Les Arts et les Métiers*, I give to the American Philosophical Society, established in New England, of which I am a member. My quarto edition of the same, *Arts et Métiers*, I give to the Library Company of Philadelphia. Such and so many of my books as I shall mark, in the said catalogue, with the name of my grandson, Benjamin Franklin Bache, I do hereby give to him; and such and so many of my books as I shall mark in the said catalogue with the name of my grandson William Bache, I do hereby give to him: and such as shall be marked with the name of Jonathan Williams, I hereby give to my cousin of that name. The residue and remainder of all my books, manuscripts, and papers, I do give to my grandson William Temple Franklin. My share in the Library Company of Philadelphia I give to my grandson, Benjamin Franklin Bache, confiding that he will permit his brothers and sisters to share in the use of it.

I was born in Boston, New England, and owe my first instructions in literature to the free grammar schools established there. I therefore give one hundred pounds sterling to my executors, to be by them, the survivors or survivor of them, paid over to the managers or directors of the free schools in my native town of Boston, to be by them, or the person or persons, who shall have the superintendence and management of the said schools, put out to interest, and so continued at interest for ever; which interest annually shall be laid out in silver medals, and given as honorary rewards annually by the directors of the said free schools, for the encouragement of scholarship in the said schools, belonging to the said town, in such manner as to the discretion of the select men of the said town shall seem meet.

Out of the salary that may remain due to me, as President of the State, I give the sum of two thousand pounds to my executors, to be by them, the survivors or survivor of them, paid over to such person or persons as the legislature of this State, by an act of Assembly, shall appoint to receive the same, in trust, to be employed for making the Schuylkill navigable.

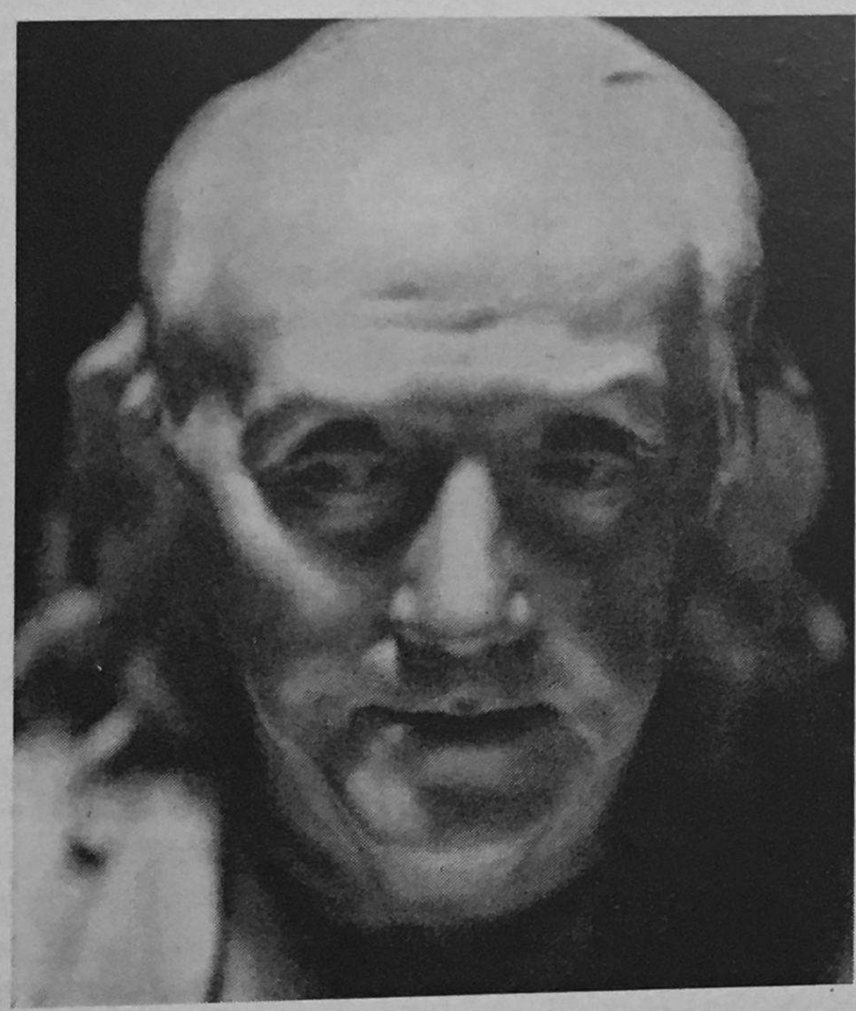
During the number of years I was in business as a stationer, printer, and postmaster, a great many small sums became due to me, for books, advertisements, postage of letters, and other matters, which were not collected, when, in 1757, I was sent by the Assembly to England as their agent—and, by subsequent appointments continued there till 1775—when, on my return, I was immediately engaged in the affairs of Congress, and sent to France in 1776, where I remained nine years, not returning till 1785, and the said debts not being demanded in such a length of time, have become in a manner obsolete, yet are nevertheless justly due. These as they are stated in my great folio ledger, E, I bequeath to the contributors of the Pennsylvania hospital, hoping that those debtors, and the descendants of such as are deceased, who now, as I find, make some difficulty of satisfying such antiquated demands as just debts, may, however, be induced to pay or give them as charity to that excellent institution. I am sensible that much must be inevitably lost; but I hope something considerable may be recovered. It is possible too, that some of the parties charged may have existing old unsettled accounts against me: in which case the managers of the said hospital will allow and deduct the amount, or pay the balance, if they find it against me.

I request my friends, Henry Hill, Esq. John Jay, Esq. Francis Hopkinson, and Mr. Edward Duffield of Bonfield, in Philadelphia county, to be the executors of this my last will and testament, and I hereby nominate and appoint them for that purpose.

I would have my body buried with as little expense or ceremony as may be.

Philadelphia, July 17th, 1788.

THE DEATH OF FRANKLIN



IN THE BEGINNING OF APRIL Benjamin Franklin was attacked with a fever and complaint of his breast, which terminated his existence. The following account of his last illness was written by his friend and physician, Dr. Jones.

"The stone, with which he had been afflicted for several years, had for the last twelve months confined him chiefly to his bed; and, during the extremely painful paroxysms, he was obliged to take large doses of laudanum to mitigate his tortures—still, in the intervals of pain, he not only amused himself with reading and conversing cheerfully with his family, and a few friends who visited him, but was often employed in doing business of a public as well as private nature, with various persons who waited on him for that purpose; and in every instance displayed, not only that readiness and disposition of doing good, which was the distinguishing characteristic of his life, but the fullest and clearest possession of his uncommon mental abilities; and not unfrequently indulged himself in those *jeux d'esprit* and entertaining anecdotes, which were the delight of all who heard him."

"About sixteen days before his death, he was seized with a feverish indisposition, without any particular symptoms attending it, till the third or fourth day, when he complained of a pain in the left breast, which increased till it became extremely acute, attended with a cough and laborious breathing. During this state, when the severity of his pains sometimes drew forth a groan of complaint, he would observe—that he was afraid he did not bear them as he ought—acknowledged his grateful sense of the many blessings he had received from that Supreme Being, who had raised him from small and low beginnings to such high rank and consideration among men—and made no doubt but his present afflictions were kindly intended to wean him from a world, in which he was no longer fit to act the part assigned him. In this frame of body and mind he continued till five days before his death, when his pain and difficulty of breathing entirely left him, and his family were flattering themselves with the hopes of his recovery, when an imposthumation, which had formed itself in his lungs, suddenly burst, and discharged a great quantity of matter, which he continued to throw up while he had sufficient strength to do it; but, as that failed, the organs of respiration became gradually oppressed—a calm lethargic state succeeded—and, on the 17th of April, 1790, about eleven o'clock at night, he quietly expired, closing a long and useful life of eighty-four years and three months."

It may not be amiss to add to the above account, that Dr. Franklin, in the year 1735, had a severe pleurisy, which terminated in an abscess of the left lobe of his lungs, and he was then almost suffocated with the quantity and suddenness of the discharge. A second attack, of a similar nature, happened some years after this, from which he soon recovered, and did not appear to suffer any inconvenience in his respiration from these diseases.

The following epitaph on himself, was written by him many years previous to his death:

The Body of
BENJAMIN FRANKLIN,
Printer,
Like the Cover of an old Book,
Its Contents torn out,
And stript of its Lettering & Gilding
lies Here food for Worms;
Yet the Work Itself shall Not be Lost,
For it Will (as he believ'd) Appear Once More
in a New
and more Elegant edition,
Corrected and Improved
By the Author.

from the Wisdom of BENJAMIN FRANKLIN

on America

I must soon quit this scene, but you may live to see our country flourish, as it will amazingly and rapidly after the war is over; like a field of young Indian corn, which long fair weather and sunshine have enfeebled and discolored, and which in that weak state, by a thunder gust of violent wind, hail, and rain, seemed to be threatened with absolute destruction; yet the storm being past, it recovers fresh verdure, shoots up with double vigour, and delights the eye, not of its owner only, but of every observing traveler.

[*According to Thomas Jefferson, while the last members were signing the Constitution of the United States, Franklin looked toward President Washington's chair, at the back of which there happened to be a painting of the sun. He remarked that painters found it difficult to distinguish in their art a rising from a setting sun.*] "I have often and often," he said, "in the course of the sessions and the vicissitudes of my hopes and fears as to its issue, looked at that behind the President without being able to tell whether it was rising or setting. But now, at last, I know that it is a *rising* and not a setting sun."

on Citizenship

". . . . Gov'r Thomas was so pleas'd with the construction of this stove . . . that he offered to give me a patent for the sole vending of them for a term of years; but I declin'd it from a principle which has ever weighed with me on such occasions, viz., *That, as we enjoy great advantages from the inventions of others, we should be glad of an opportunity to serve others by any invention of ours; and this we should do freely and generously.*"

It is undoubtedly the duty of all persons to serve the country they live in, according to their abilities; yet I sincerely acknowledge, that I have hitherto been very deficient in this particular; whether it was for want of will or opportunity, I will not at present stand to determine: Let it suffice, that I now take up a resolution, to do for the future all that *lies in my way* for the service of my countrymen.

There is no Science, the Study of which is more useful and commendable than the Knowledge of the true Interest of one's Country; and perhaps there is no Kind of Learning more abstruse and intricate, more difficult to acquire in any Degree of Perfection than This, and therefore none more generally neglected. Hence it is, that we every Day find Men in Conversation contending warmly on some Point in Politicks, which, altho' it may nearly concern them both, neither of them understand any more than they do each other.

I make no doubt but reports will be spread by my enemies to my disadvantage, but let none of them trouble you. If I find I can do my country no good, I will take care at least not to do it any harm; I will neither seek nor expect any thing for myself; and, though I may perhaps not be able to obtain for the people what they wish and expect, no interest shall induce me to betray the trust they have reposed in me.

There is no rank in natural knowledge of equal dignity and importance with that of being a good parent, a good child, and good husband or wife, a good neighbour or friend, a good subject or citizen, that is, in short, a good Christian.

on Education

Writing one's own language well is a necessary accomplishment after good speaking. It is the writing master's business to take care that the students make fair characters and place them straight and even in the lines; but to form their style, and even to take care that the stops and capitals are properly disposed, is the part of the English master. The students should be put on writing letters to each other on common occurrences, and on various subjects, imaginary business, etc., containing little stories, accounts of their late reading, what parts of authors please them, and why . . .

The idea of what is *true merit* should also be often presented to youth, explain'd and impressed on their minds, as consisting in an *inclination* join'd with an *ability* to serve mankind, one's country, friends and family; which *ability* is (with the blessing of God) to be acquir'd or greatly increased by *true learning*; and should indeed be the great *aim* and *end* of all learning. I think with you, that nothing is of more importance for the public weal, than to form and train up youth in wisdom and virtue.

Wise and good men are, in my opinion, the *strength* of a State far more so than riches or arms, which, under the management of ignorance and wickedness, often draw on destruction, instead of providing for the safety of a people. And though the culture bestowed on *many* should be successful only with a *few*, yet the influence of those few and the service in their power may be very great. Even a single woman, that was wise, by her wisdom, saved a city. I expect also, that general virtue is more probably to be expected and obtained from the *education* of youth, than from the *exhortation* of adult persons; bad habits and vices of the mind being, like diseases of the body, more easily prevented than cured.

on Enmities

I like immortal friendships, but no immortal enmities; and therefore kill the latter whenever I have a good opportunity, thinking it no murder.

on Envy

It is enough for good minds to be affected at other people's misfortunes; but they, that are vexed at everybody's good luck can never be happy.

on Faith in Friends

You mention, that you *feel yourself hurt*. Permit me to offer you a maxim, which has thro' life been of use to me & may be so to you in preventing imaginary hurts. It is, always to *suppose* one's friends *may be right* till one *finds* them wrong; rather than *to suppose them wrong* till one finds them right. You have heard and imagined all that can be said or suppos'd on one side of the question, but not on the other.

on Freedom

All Europe is on our side of the question, as far as applause and good wishes can carry them. Those who live under arbitrary power do nevertheless approve of liberty, and wish for it; they almost despair of recovering it in Europe; . . . . 'tis a common observation here, that our cause is the *cause of all mankind*, and that we are fighting for their liberty in defending our own.

God grant that not only the love of liberty but a thorough knowledge of the rights of man may pervade all the nations of the earth, so that a philosopher may set his foot anywhere and say: *This is my country*.

Grievances cannot be redressed unless they are known, and they cannot be known but through complaints and petitions. If these are deemed affronts, and the messengers punished as offenders, who will henceforth send petitions? And who will deliver them? It has been thought a dangerous thing in any State to stop up the vent of griefs. Wise governments have therefore generally received petitions with some indulgence, even when but slightly founded. Those, who think themselves injured by their rulers, are sometimes, by a mild and prudent answer, convinced of their error. But where complaining is a crime, hope becomes despair.

on Gratitude

Thanks for peace and liberty, for food and raiment, for corn and wine and milk, and every kind of healthful nourishment, Good God, I thank Thee! Thanks for the common benefits of air and light; for useful fire and delicious water, Good God, I thank Thee! Thanks for knowledge and literature and every useful art, for my friends and their prosperity, and for the fewness of my enemies, Good God, I thank Thee! Thanks for all thy innumerable benefits; for life and reason and the use of speech; for health and joy and every pleasant hour, My good God, I thank Thee!

on Greatness

If we were as industrious to become Good as to make ourselves great, we should become really great by being good, and the number of valuable men would be much increased; but it is a grand mistake to think of being great without goodness; and I pronounce it as certain, that there was never yet a truly great man, that was not at the same time truly virtuous.

on Honesty

In short, I believe it is impossible for a man, though he has all the cunning of a devil, to live and die a villain and yet conceal it so well as to carry the name of an honest fellow to the grave with him, but some one, but some accident or other, shall discover him. Truth and sincerity have a certain distinguishing native lustre about them, which cannot be perfectly counterfeited; they are like fire and flame, that cannot be painted.

on Immigration

Our country offers to strangers nothing but a good climate, fertile soil, wholesome air, free governments, wise laws, liberty, a good people to live among, and a hearty welcome. Those Europeans who have these or greater advantages at home would do well to stay where they are.

on International Commerce

Commerce among nations, as well as between private persons, should be fair and equitable, by equivalent exchanges and mutual supplies. The taking unfair advantages of a neighbour's necessities though attended with temporary success, always breeds bad blood. To lay duties on a commodity exported, which our neighbours want, is a knavish attempt to get something for nothing. The statesman who first invented it had the genius of a pickpocket if fortune had suitably placed him. The nations, who have practised it, have suffered fourfold, as pickpockets ought.

on Patriotism

The eyes of Christendom are upon us, and our honor as a people is become a matter of the utmost consequence to be taken care of. If we give up our rights in this contest, a century to come will not restore us to the opinion of the world; we shall be stamped with the character of . . . . poltroons and fools . . . . Present inconveniences are, therefore, to be borne with fortitude, and better times expected.

on Peace

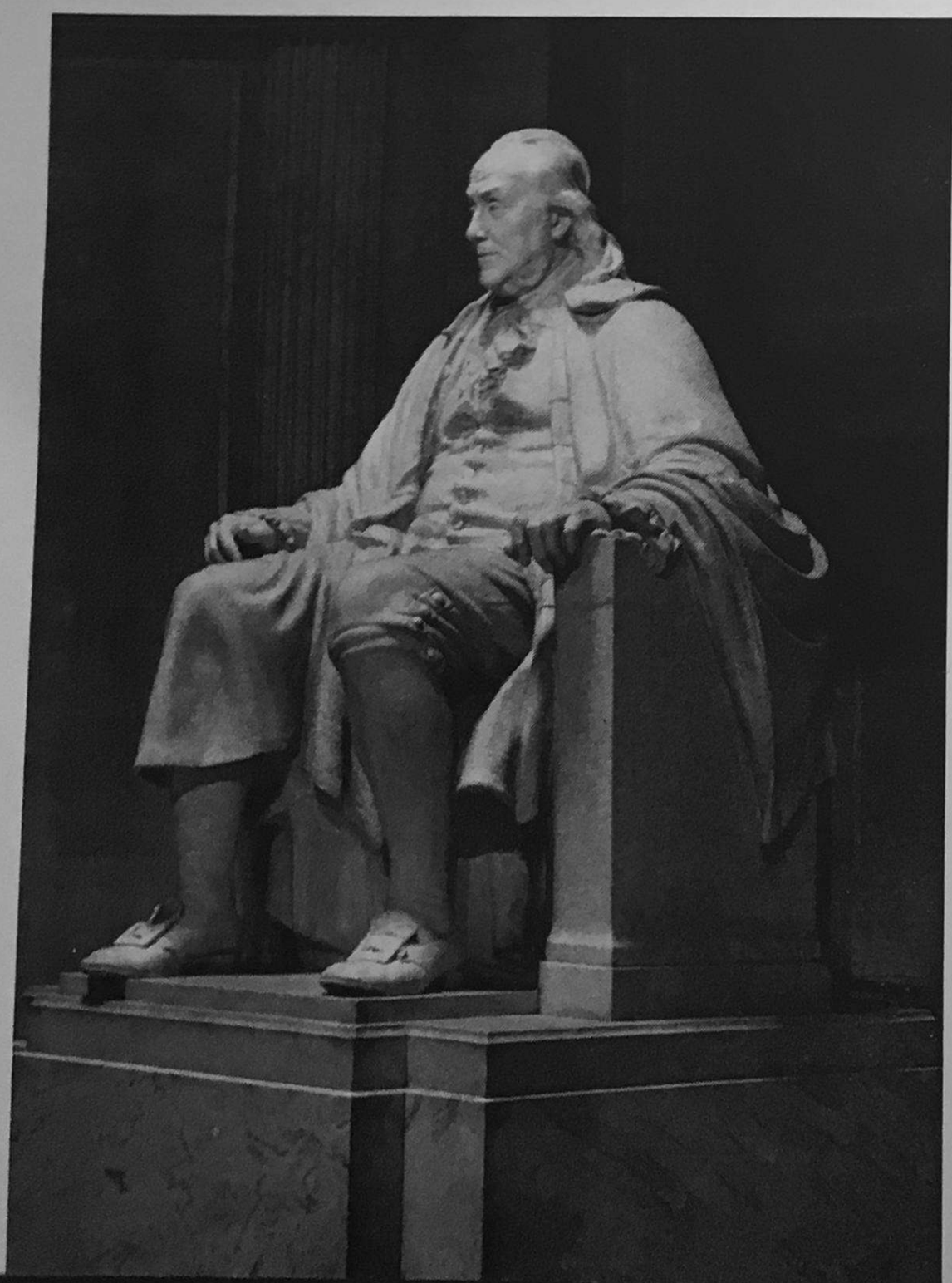
At length we are in peace, God be praised, and long, very long, may it continue. All wars are follies, very expensive and very mischievous ones. When will Mankind be convinced of this, and agree to settle their differences by arbitration?

To make a Peace durable, what may give Occasion for future Wars should if practicable be removed.

on Providence

Providence will bring about its own ends by its own means, and if it intends the downfall of a nation, that nation will be so blinded by its pride as not to see its danger, or how its fall may be prevented.

Providence seems by every means intent on making us a great people. May our virtues, public and private, grow with us, and be durable, that liberty, civil and religious, may be secured to posterity, and to all from every part of the Old World that take refuge among us.



on Public Service

My rule, in which I have always found satisfaction, is, never to turn aside in publick affairs through views of private interest; but to go straight forward in doing what appears to me right at the time, leaving the consequences with Providence.

We must not in the course of publick life expect *immediate* approbation and *immediate grateful* acknowledgment of our services. But let us persevere thro' abuse and even injury. The internal satisfaction of a good conscience is always present, and time will do us justice in the minds of the people, even of those at present the most prejudic'd against us.

Having been from my youth more or less engag'd in publick affairs, it has often happened to me in the course of my life to be censured sharply for the part I took in them. Such censures I have generally passed over in silence, conceiving, when they were just, that I ought rather to amend than defend; and when they were undeserved, that a little time would justify me. Splashes of dirt thrown upon my character, I suffered while fresh to remain: I did not chuse to spread by endeavoring to remove them, but rely'd on the adage *that they would rub off when they were dry.*

I will neither seek nor expect anything for myself; and, though I may perhaps not be able to obtain for the people what they wish and expect, no interest shall induce me to betray the trust they have reposed in me.

on Religion

We have been assured, in the Sacred Writings, that 'except the Lord build the House, they labour in vain that build it.' I firmly believe this: and I also believe, that, without His concurring aid, we shall succeed in this political building no better than the builders of Babel; we shall be divided by our partial, local interests, our projects will be confounded, and we ourselves shall become a reproach and a bye-word down to future ages.

A Parable Against Persecution

And it came to pass after these things, that Abraham sat in the door of his tent, about the going down of the sun.

And behold a man, bent with age, coming from the way of the wilderness, leaning on a staff.

And Abraham arose and met him, and said unto him, "Turn in, I pray thee, and wash thy feet, and tarry all night, and thou shalt arise early in the morning, and go on thy way".

But the man said, "Nay, for I will abide under this tree."

And Abraham pressed him greatly; so he turned, and they went into the tent; and Abraham baked unleavened bread, and they did eat.

And When Abraham saw that the man blessed not God, he said unto him, "Wherefore dost thou not worship the most high God, Creator of heaven and earth?"

And the man answered and said, "I do not worship thy God, neither do I call upon his name; for I have made to myself a god, which abideth always in mine house, and provideth me with all things".

And Abraham's zeal was kindled against the man, and he arose and fell upon him, and drove him forth with blows into the wilderness.

And God called unto Abraham, saying, "Abraham, where is the stranger?"

And Abraham answered and said, "Lord, he would not worship thee, neither would he call upon thy name; therefore have I driven him out from before my face into the wilderness".

And God said, "Have I borne with him these hundred and ninety and eight years, and nourished him, and clothed him, notwithstanding his rebellion against me; and couldst not thou, who are thyself a sinner, bear with him one night?"

And Abraham said, "Let not the anger of the Lord wax hot against his servant; lo, I have sinned; lo, I have sinned; forgive me, I pray thee."

And Abraham arose, and went forth into the wilderness, and sought diligently for the man, and found him, and returned with him to the tent; and when he had entreated him kindly, he sent him away on the morrow with gifts.

And God spake again unto Abraham, saying, "For this thy sin shall thy seed be afflicted four hundred years in a strange land;

But for thy repentance will I deliver them; and they shall come forth with power, and with gladness, and with much substance."

Fear God, and your enemies will fear you.

Many have quarrel'd about religion, that never practised it.

Talking against religion is unchaining a tyger; The beast let loose may worry his deliverer.

Sin is not hurtful because forbidden, but forbidden because it is hurtful.

on Science

The rapid progress *true* science now makes, occasions my regretting sometimes that I was born so soon. It is impossible to imagine the height to which may be carried, in a thousand years, the power of *man over matter*. We may perhaps learn to deprive large masses of their gravity, and give them absolute levity, for the sake of easy transport. Agriculture may diminish its labour and double its produce; all diseases may by sure means be prevented or cured, not excepting even that of old age, and our lives lengthened at pleasure even beyond the antediluvian standard. O that moral science were in a fair way of improvement, that men would cease to be wolves to one another, and that human beings would at length learn what they now improperly call humanity.

on Success

". . . . I have no doubt but Mr. Hall will succeed well in what he undertakes. He is obliging, discreet, industrious, and honest; and where those qualities meet, things seldom go amiss. . . ."

on Taxes

Idleness and pride tax with a heavier hand than Kings and parliaments; if we can get rid of the former, we may easily bear the latter.

In this world, nothing can be said to be certain except death and taxes.

Friends and neighbors, the taxes are indeed very heavy, and if those laid on by the government were the only ones we had to pay, we might the more easily discharge them; but we have many others, and much more grievous to some of us. We are taxed twice as much by our *idleness*, three times as much by our *pride*, and four times as much by our *folly*; and from these taxes the commissioners cannot ease or deliver us by allowing an abatement. However, let us hearken to good advice, and something may be done for us. 'God helps them that help themselves.'

When the government finds it necessary for the common benefit, advantage, and safety of the nation, for the security of our liberties, property, religion, and every thing that is dear to us, that certain sums shall be yearly raised by taxes, duties, etc., and paid into the publick treasury, thence to be dispens'd by government for those purposes; ought not every *honest man* freely and willingly to pay his just proportion of this necessary expense? Can he possibly preserve a right to that character, if, by any fraud, stratagem, or contrivance, he avoids that payment in whole or in part? . . . . He will, perhaps, be ready to tell me, that he does not wrong his neighbors, he scorns the imputation: He only cheats the King a little, who is very able to bear it. This, however, is a mistake; the publick treasure is a treasure of the nation, to be applied for national purposes.

There are no gains without pains.

Present inconveniences are, therefore, to be borne with fortitude and better times expected.

on Thrift

A man may, if he knows not how to save, keep his nose to the grindstone.

For age and want, save while you may; no morning sun lasts a whole day.

on Tolerance

If an Indian injures me, does it follow that I may revenge that injury on all *Indians?* It is well known, that *Indians* are of different tribes, nations and languages, as well as the white people. In *Europe*, if the French, who are white people, should injure the *Dutch*, are they to revenge it on the *English*, because they too are white people? The only crime of these poor wretches seems to have been, that they had a reddish-brown skin, and black hair; and some people of that sort, it seems, had murdered some of our relations. If it be right to kill men for such a reason, then, should any man, with a freckled face and red hair, kill a wife or child of mine, it would be right for me to revenge it, by killing all the freckled red-haired men, women and children, I could afterwards anywhere meet with.

When the natural weakness and imperfection of human understanding is considered, the unavoidable influence of education, custom, books, and company upon our ways of thinking, I imagine a man must have a good deal of vanity who believes, and a good deal of boldness who affirms, that all the doctrines he holds are true, and all he rejects are false. . . . I think opinions should be judged of by their influences and effects; and, if a man holds none that tend to make him less virtuous or more vicious, it may be concluded he holds none that are dangerous; which I hope is the case with me.

on Unity

Join or Die.

We must all hang together, or assuredly we shall all hang separately.

on Virtue

They that do good, not only do good themselves, but by their example are the occasion of much good being done by others.

A man of virtue is an honour to his country, a glory to humanity, a satisfaction to himself, and a benefactor to the whole world; he is rich without oppression or dishonesty, charitable without ostentation, courteous without deceit, and brave without vice.

on War

We make daily great improvements in *natural*, there is one I wish to see in *moral* philosophy; the discovery of a plan, that would induce and oblige nations to settle their disputes without first cutting one another's throats. When will human reason be sufficiently improv'd to see the advantage of this? When will we be convinc'd that even successful wars at length become misfortunes to those who unjustly commenced them, and who triumph'd blindly in their success, not seeing all its consequences.

Since the foolish part of mankind will make wars from time to time with each other, not having sense enough otherwise to settle their differences, it certainly becomes the wiser part, who cannot prevent those wars, to alleviate as much as possible the calamities attending them.

After much occasion to consider the folly and mischiefs of a state of warfare, and the little or no advantage obtain'd even by those nations, who have conducted it with the most success, I have been apt to think, that there has never been, nor ever will be, any such thing as a *good* war, or a *bad* peace.

Our Cause is the Cause of all Mankind, and we are fighting for their Liberty in defending our own. 'Tis a glorious task assign'd us by Providence; which has, I trust, given us Spirit and Virtue equal to it, and will at last crown it with Success.

on the Way to Wealth

Righteousness, or *justice*, is, undoubtedly of all the virtues, the surest foundation on which to create and establish a new State. But there are two nobler virtues, *industry* and *frugality*, which tend more to increase the wealth, power and grandeur of the community, than all the others without them.

I experience, too, the truth of the observation, 'that after getting the first hundred pounds, it is more easy to get the second', money itself being of a prolific nature.

I would not have you discouraged at the little dullness of business, which is only occasional. A close attention to your shop, and application to business, will always secure more than an equal share, because every competitor will not have those qualities. Some of them, therefore, must give way to you, and the constant growth of the country will increase the trade of all, that steadily stand ready for it.

Frugality is an enriching virtue; a virtue I never could acquire in myself; but I was once lucky enough to find it in a wife, who thereby became a fortune to me.

Remember, that *time* is money . . . . Remember that *credit* is money . . . . Remember, that money is of the prolific, generating nature. . . . Remember, that six pounds a year is but a groat a day. . . . Remember this saying, *The good paymaster is lord of another man's purse*. He that is known to pay punctually and exactly to the time he promises, may at any time, and on any occasion, raise all the money his friends can spare. . . . In short the way to wealth, if you desire it, is as plain as the way to market. It depends chiefly on two words, *industry* and *frugality*; that is, waste neither *time* nor *money*, but make the best use of both.

on Wisdom

A wise man will desire no more than what he may get justly, use soberly, distribute cheerfully and leave contentedly.

MAXIMS ON CHARACTER AND LIFE

Visits should be short, like a winter's day, Lest you're too troublesome, hasten away.

A house without woman and firelight, is like a body without soul or sprite.

Light purse, heavy heart.

He's a fool that makes his doctor his heir.

Ne'er take a wife till thou hast a house (and a fire) to put her in.

He's gone, and forgot nothing but to say farewell to his creditors.

Great talkers, little doers.

Eat to live, and not live to eat.

After three days men grow weary of a wench, a guest, and weather rainy.

To lengthen thy life, lessen thy meals.

He that lieth down with dogs, shall rise up with fleas.

Tongue double, brings trouble.

A good wife lost, is God's gift lost.

He is ill clothed that is bare of virtue.

He's the best physician that knows the worthlessness of the most medicines.

There is no *little* enemy.

The heart of the fool is in his mouth, but the mouth of the wise man is in his heart.

Nothing more like a fool, than a drunken man.

God works wonders now and then;
Behold! a lawyer, an honest man.

Innocence is its own defence.

Without justice courage is weak.

Many dishes, many diseases.
Many medicines, few cures.

Better slip with foot than tongue.

Blame-all and praise-all are two blockheads.

In success be moderate.

No man e'er was glorious, who was not laborious.

All things are easy to industry,
All things are difficult to sloth.

Fools multiply folly.

Beauty and folly are old companions.

Hope of gain lessens pain.

Be neither silly nor cunning, but wise.

Who pleasure gives, shall joy receive.

Be not sick too late, nor well too soon.

Would you persuade, speak of interest, not of reason.

There have been as great souls unknown to fame as any of the most famous.

Teach your child to hold his tongue, he'll learn fast enough to speak.

Don't value a man for the quality he is of, but for the qualities he possesses.

He that cannot obey, cannot command.

An innocent plowman is more worthy than a vicious Prince.

He that is rich need not live sparingly, and he that can live sparingly need not be rich.

Drink water, put the money in your pocket, and leave the dry-bellyache in the punch-bowl.

He does not possess wealth, it possesses him.

He that waits upon fortune, is never sure of a dinner.

A learned blockhead is a greater blockhead than an ignorant one.

Marry your son when you will, but your daughter when you can.

Avarice and happiness never saw each other, how then should they become acquainted.

If you would have guests merry with cheer, be so yourself, or so at least appear.

Approve not of him who commends all you say.

By diligence and patience, the mouse bit in two the cable.

Look before, or you'll find yourself behind.

He that goes far to marry, will either deceive or be deceived.

Necessity never made a good bargain.

There's many witty men whose brains can't fill their bellies.

Be slow in choosing a friend, slower in changing.

Pain wastes the body; pleasures the understanding.

Nothing but money, is sweeter than honey.

Of learned fools, I have seen ten times ten; of unlearned wise men, I have seen a hundred.

Three may keep a secret, if two of them are dead.

Poverty wants some things, luxury many things, avarice all things.

A lie stands on one leg, truth on two.

It is better to take many injuries, than to give one.

Early to bed and early to rise, makes a man healthy, wealthy, and wise.

To be humble to superiors is duty, to equals courtesy, to inferiors nobleness.

Here comes the orator, with his flood of words, and his drop of reason.

Are you angry that others disappoint you? Remember you cannot depend upon yourself.

If you know how to spend less than you get, you have the philosopher's stone.

Fish and visitors smell in three days.

Diligence is the mother of good luck.

Wealth is not his that has it, but his that enjoys it.

'T is easy to see, hard to foresee.

Admiration is the daughter of ignorance.

God helps them that help themselves.

None preaches better than the ant, and she says nothing.

Don't throw stones at your neighbors', if your own windows are glass.

He that sells upon trust, loses many friends, and always wants money.

He that speaks much, is much mistaken.

Creditors have better memories than debtors.

He that lives well is learned enough.

He that scatters thorns, let him not go barefoot.

God heals and the doctor takes the fee.

If you desire many things, many things will seem but a few.

I saw few die of hunger, of eating—100,000.

He that would live in peace and at ease,
Must not speak all he knows, nor judge all he sees.

The use of money is all the advantage there is in having money.

If you will not hear reason, she'll surely rap your knuckles.

We may give advice, but we cannot give *conduct*.

Gain may be temporary and uncertain, but ever while you live, expense is constant and certain.

Buy what thou hast no need of,
and ere long thou shalt sell thy necessaries.

He that can take rest is greater than he that can take cities.

He that can compose himself, is wiser than he that composes books.

After crosses and losses, men grow humbler and wiser.

Well done is better than well said.

At the working man's house hunger looks in, but dares not enter.

The worst wheel of the cart makes most noise.

If you'd have a servant that you like, serve yourself.

Tell a miser he's rich, and a woman she's old, you'll get no money of one, nor kindness of t' other.

The creditors are a superstitious sect, great observers of set days and times.

The noblest question in the world is, *What good may I do in it?*

Nothing so popular as goodness.

There are three faithful friends—an old wife, an old dog, and ready money.

Who has deceiv'd thee so oft as thyself?

Is there anything men take more pains about than to make themselves unhappy?

Read much, but not too many books.

If thou hast wit and learning, add to it wisdom and modesty.

You may be happier than princes, if you'll be more virtuous.

If you would not be forgotten, as soon as you are dead and rotten, either write things worth reading, or do things worth the writing.

Sell not virtue for wealth, nor liberty for power.

Let thy vices die before thee.

Keep your eyes wide open before marriage, half shut afterwards.

Since thou art not sure of a minute, throw not away an hour.

Wish not so much to live long, as to live well.

As we must account for every idle word, so we must for every idle silence.

I have never seen the Philosopher's stone that turns lead into gold, but I have known the pursuit of it turn a man's gold into lead.

Time is an herb that cures all diseases.

Reading makes a full man—meditation a profound man—discourse a clear man.

Wish a miser long life, and you wish him no good.

None but the well-bred man knows how to confess a fault, or acknowledge himself in an error.

Drive thy business; let not that drive thee.

Wink at small faults—remember thou hast great ones.

Eat to please thyself, but dress to please others.

Search others for their virtues, thyself for thy vices.

If thou would'st live long, live well; for folly and wickedness shorten life.

Trust thyself, and another shall not betray thee.

Historians relate, not so much what is done, as what they would have believed.

Grace thou thy house, and let not that grace thee.

Thou cans't not joke an enemy into a friend, but thou may'st a friend into an enemy.

He that falls in love with himself, will have no rivals.

Let thy child's first lesson be obedience, and the second will be what thou wilt.

Rather go to bed supperless than run in debt for a breakfast.

What maintains one vice would bring up two children.

Hear no ill of a friend, nor speak of an enemy.

Pay what you owe, and you'll know what is your own.

Industry need not wish.

Great beauty, great strength, and great riches are really and truly of no great use; a right heart exceeds all.

To bear other people's afflictions, every one has courage and enough to spare.

Fear not death; for the sooner we die, the longer shall we be immortal.

When you speak to a man, look on his eyes; when he speaks to thee, look on his mouth.

Observe all men; thyself most.

Thou hadst better eat *salt* with the *philosophers of Greece, than sugar with the courtiers* of Italy.

Marry above thy match, and thou'lt get a master.

Fear to do ill, and you need fear nought else.

Avoid dishonest gain: no price,
Can recompence the pangs of vice.

When befriended, remember it:
When you befriend,—forget it.

Employ thy time well, if thou meanest to gain leisure.

Let thy discontents be thy secrets;—if the world knows them't will despise thee and increase them.

Don't overload gratitude; if you do, she'll kick.

Be always ashamed to catch thyself idle.

At 20 the will reigns; at 30 the wit; at 40 the judgment.

Lying rides upon debt's back.

If you would keep your secret from an enemy, tell it not to a friend.

Up, sluggard, and waste not life; in the grave will be sleeping enough.

Well done, is twice done.

Honours change manners.

There are no fools so troublesome as those that have wit.

Have you somewhat to do to-morrow; do it to-day.

Money and good manners make the Gentleman.

He who gives promptly, gives twice as much.

Death takes no bribes.

One good Husband is worth two good Wives; for the scarcer things are the more they're valued.

Eat few Suppers, and you'll need few Medicines.

To err is human, to repent divine; to persist, devilish.

The World is full of fools and faint hearts; and yet every one has courage enough to bear the misfortunes, and wisdom enough to manage the Affairs of his neighbour.

The wise understand half a word.

Virtue remains when all else is lost.

Experience keeps a dear school, yet Fools will learn in no other.

Happy is he that takes caution from others.

What you would seem to be, be really.

Make haste slowly.

Industry, Perseverance, and Frugality, make Fortune yield.

Prayers and Provender hinder no Journey.

Beware of little Expences; a small leak will sink a great ship.

He's a Fool that cannot conceal his wisdom.

Great spenders are bad lenders.

No gains without pains.

'T is easier to prevent bad habits than to break them.

Every Man has assurance enough to boast of his honesty —few of their Understanding.

It's the easiest Thing in the World for a Man to deceive himself.

Virtue and Happiness are Mother and Daughter.

The generous Mind least regards Money and yet most feels the Want of it.

Dost thou love Life? Then do not squander Time; for that's the Stuff Life is made of.

Good Sense is a Thing all need, few have, and none think they want.

Want of Care does us more damage than Want of Knowledge.

Take Courage, Mortal; Death can't banish thee out of the Universe.

A life of leisure and a life of laziness are two things.

Strive to be the greatest Man in your Country, and you may be disappointed; Strive to be the best and you may succeed: He may well win the race that runs by himself.

There is no Man so bad but he secretly respects the Good.

A good Example is the Best Sermon.

Lost time is never found again.

Life with Fools consists in Drinking; With the wise Man, Living's Thinking.

Liberality is not giving much, but giving wisely.

Suspicion may be no fault but showing it may be a great one.

He that's secure is not safe.

The second Vice is Lying; the first is running in Debt.

When you're good to others, you are best to yourself.

Half Wits talk much but say little.

Pardoning the Bad, is injuring the Good.

Content makes poor men rich; Discontent makes rich men poor.

Having been poor is no shame, but being ashamed of it, is.

The wise Man draws more Advantage from his Enemies, than the Fool from his Friends.

All would live long, but none would be old.

Keep Conscience clear, Then never fear.

There are three Things extremely hard, Steel, a Diamond, and to know one's self.

He is a Governor that governs his Passions, and he a Servant that serves them.

Little Strokes, Fell great Oaks.

Genius without Education is like Silver in the Mine.

Prosperity discovers Vice. Adversity, Virtue.

There are lazy Minds as well as lazy Bodies.

If your Riches are yours, why don't you take them with you to the other World?

What more valuable than Gold? Diamond.
Than Diamond? Virtue.

To-day is Yesterday's Pupil.

If worldly Goods cannot save me from Death, they ought not to hinder me of eternal Life.

'Tis great Confidence in a Friend to tell him your Faults, greater to tell him his.

Ambition often spends foolishly what Avarice had wickedly collected.

A Brother may not be a Friend, but a Friend will always be a Brother.

Meanness is the Parent of Insolence.

If man had Half his Wishes, he would double his Troubles.

Praise to the undeserving, is severe Satire.

Success has ruin'd many a Man.

'Tis against some Men's Principle to pay Interest, and seems against others' Interest to pay the Principal.

Philosophy as well as Foppery often changes Fashion.

He that best understands the World, least likes it.

He that is of the Opinion Money will do every Thing may well be suspected of doing every Thing for Money.

If you'd know the Value of Money, go and borrow some.

Learning to the Studious; Riches to the Careful; Power to the Bold; Heaven to the Virtuous.

A Man without a Wife, is but half a Man.

Speak little, do much.

If you would be loved, love and be lovable.

The honest Man takes Pains, and then enjoys Pleasures; the knave takes Pleasure, and then suffers Pains.

Think of three Things—whence you came, where you are going, and to whom you must account.

Who is wise? He that learns from every One.
Who is powerful? He that governs his Passions.
Who is rich? He that is Content.
Who is that? Nobody.

Being ignorant is not so much a Shame, as being unwilling to learn.

God gives all Things to Industry.

A long Life may not be good enough, but a good Life is long enough.

Love your Enemies, for they tell you your Faults.

The Wit of Conversation consists more in finding it in others, than showing a great deal yourself. He who goes out of your Company pleased with his own Facetiousness and Ingenuity, will the sooner come into it again. Most men had rather *please* than *admire* you, and seek less to be *instructed* and *diverted*, than *approved* and *applauded*, and it is certainly the most delicate Sort of Pleasure, to *please another*.

Be civil to all; sociable to many; familiar with few; Friend to one; enemy to none.

Trouble springs from Idleness; Grievous toil from needless Ease.

A false Friend and a Shadow attend only while the Sun shines.

To-morrow every Fault is to be amended; but that Tomorrow never comes.

Laziness travels so slowly that Poverty soon overtakes him.

When a Friend deals with a Friend, Let the bargain be clear and well penn'd, That they may continue Friends to the End.

He that never eats too much, will never be lazy.

Many a Man's own Tongue gives Evidence against his Understanding.

Nothing dries sooner than a Tear.

One To-day is worth two To-morrows.

The way to be safe is never to be secure.

Work as if you were to live 100 years, Pray as if you were to die To-morrow.

Idleness is the Dead Sea, that swallows all Virtues: Be active in Business, that Temptation may miss her Aim; the Bird that sits, is easily shot.

The Royal Crown cures not the Head-ache.

Fools need Advice most, but wise Men only are the better for it.

Silence is not always a Sign of wisdom, but Babbling is ever a Folly.

Great Modesty often hides great Merit.

You may delay, but Time will not.

Virtue may not always make a Face handsome, but Vice will certainly make it ugly.

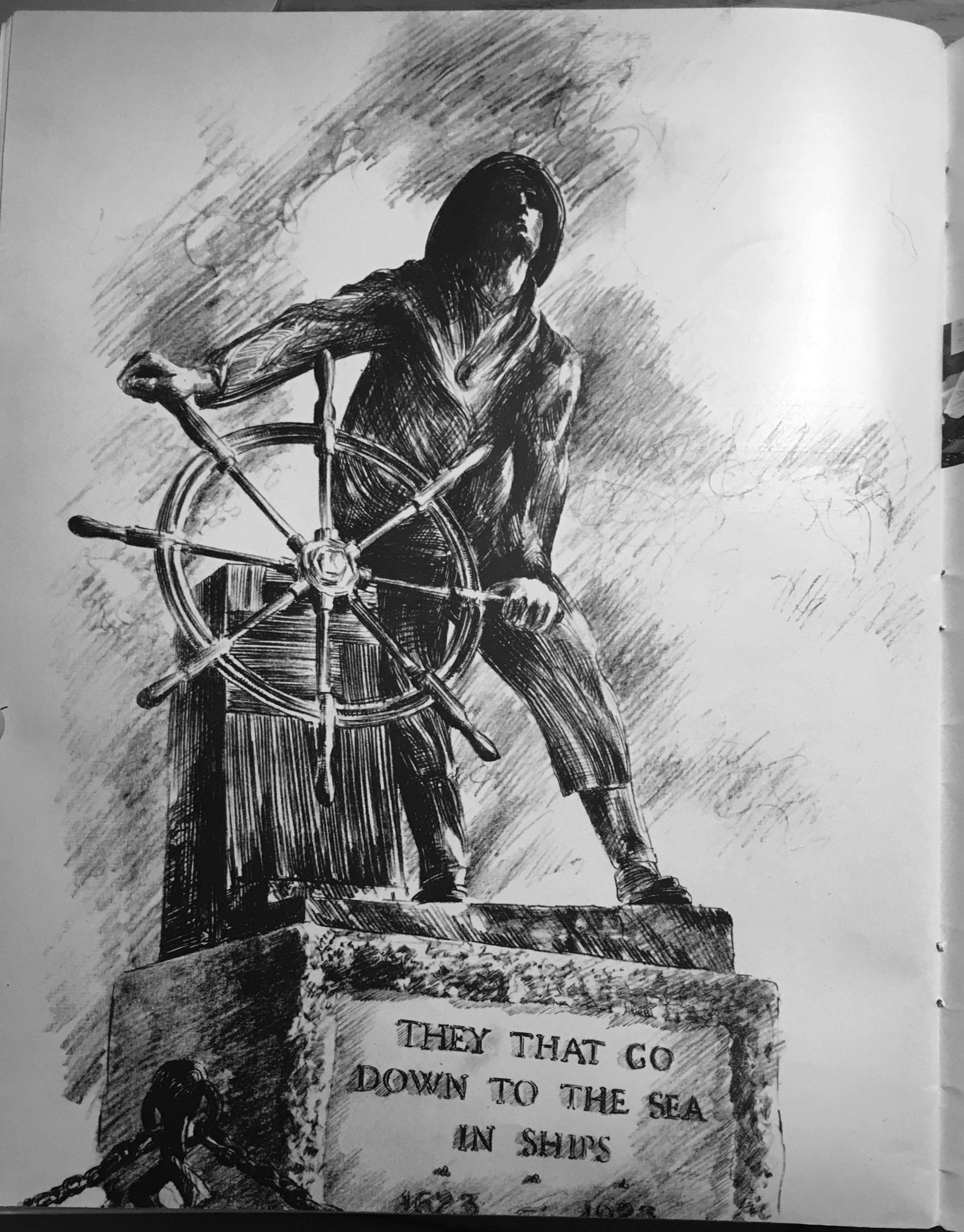
Content is the Philosopher's Stone, that turns all it touches into Gold.

Half the Truth is often a great lie.

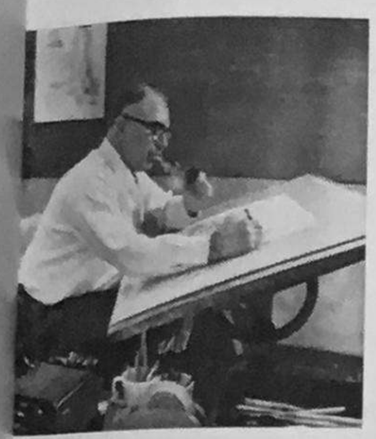
The Way to see by Faith is to shut the Eye of Reason.

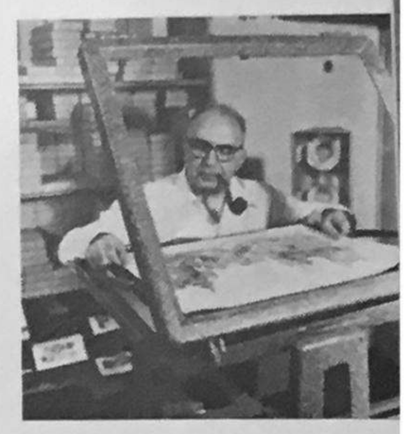
A full Belly makes a dull Brain.

The Doors of wisdom are Never shut.


THEY THAT GO
DOWN TO THE SEA
IN SHIPS
1623

Alec Stern MASTER OF ARTS





ALEC STERN HAS ACHIEVED RENOWN as an etcher and illustrator, but he is a great deal more than this: he is a printer, engraver, musician and philosopher.

Born of immigrant parents in 1904, Alec Stern's earliest memories are of tall, white sailing ships gliding through the patchy fog of San Francisco's Golden Gate. These early memories produced a lifelong interest in sailing ships, which is often carried over to his illustrations.

Stern's creative talent revealed itself early in life when, prevented by a leg injury from joining in school sports, he would remain at his desk, drawing. By the time he was twelve years old he was unofficial art instructor to his school class. On graduation from high school he had completed *all* the arts courses and had also become an accomplished musician. Then followed a four-year scholarship at the California School of Fine Arts, where he was so enthused by the various classes that he attended them day and night.

After four years of "bread-and-butter" jobs with printers, advertising agencies, art studios, and showcard shops he secured a part-time job with the *San Francisco Chronicle*, to gain spare time to experiment with his etchings, but the pace and diversity of newspaper work proved unexpectedly intriguing. His studies of marine life became so popular that they were featured in the paper bi-weekly for three years.

Stern recalls how the marine editor would await the completion of each drawing, and, with great reverence, proceed to write appropriate verses, stimulated by several glasses of hot tea to which were discreetly added generous quantities of rum.

By 1935, Stern was sufficiently established in journalism to be sent on a cruise to New York by his newspaper and the Grace Line, to create etchings of the various ports of call. The trip paid an unexpected dividend, for passengers began buying his work, including Mrs. Theodore Roosevelt, who purchased several etchings for "my son, Kermit." When the New York skyline loomed ahead, Stern had added 300 dollars to his slim wallet.

Magnetized by the great city with its turbulent crowds, creaking pushcarts, and clattering "elevated", Stern decided to stay in New York and mailed his travel sketches to his editor with a letter of resignation. He soon began to earn a living by drawing and etching. In New York, also, he met Anne, then a buyer of artwork for a publishing company. Soon she became his wife, and, says Stern, his most fastidious art critic.

The arrival of their son Leonard brightened the Stern home, but necessitated an increased income. Stern became a designer for a large company, while continuing to produce Christmas mementos for business firms.

At the outbreak of war he studied welding with the idea of entering the shipyards, but the Navy preferred to use his artistic skill and experience to help produce animated training films. Soon their daughter Mimi was born, and shortly afterwards the family moved to California.

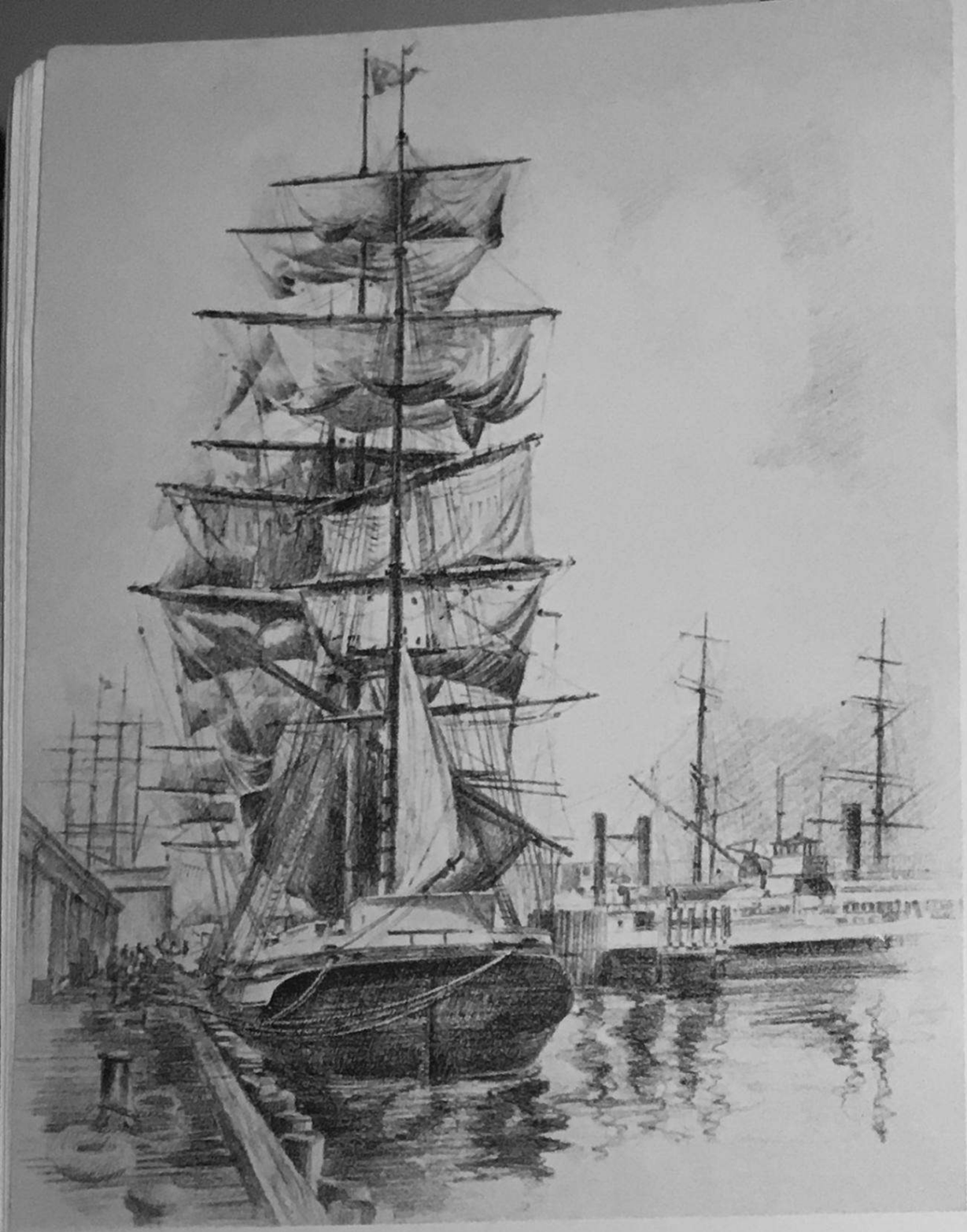
When the war ended, Stern decided to become his own publisher. He bought a lithographic press which, combined with his etching press, was the foundation of his present successful one-man business in printed etchings, Christmas cards, and mementos.

Stern's creative work is usually done at night, when all is quiet and he can concentrate. Like many great artists, he sometimes becomes so absorbed in his work that he fails to notice the passing of time, until the phone rings and he hears his wife say: "Dear, it is seven a.m., and you had better come home to breakfast."

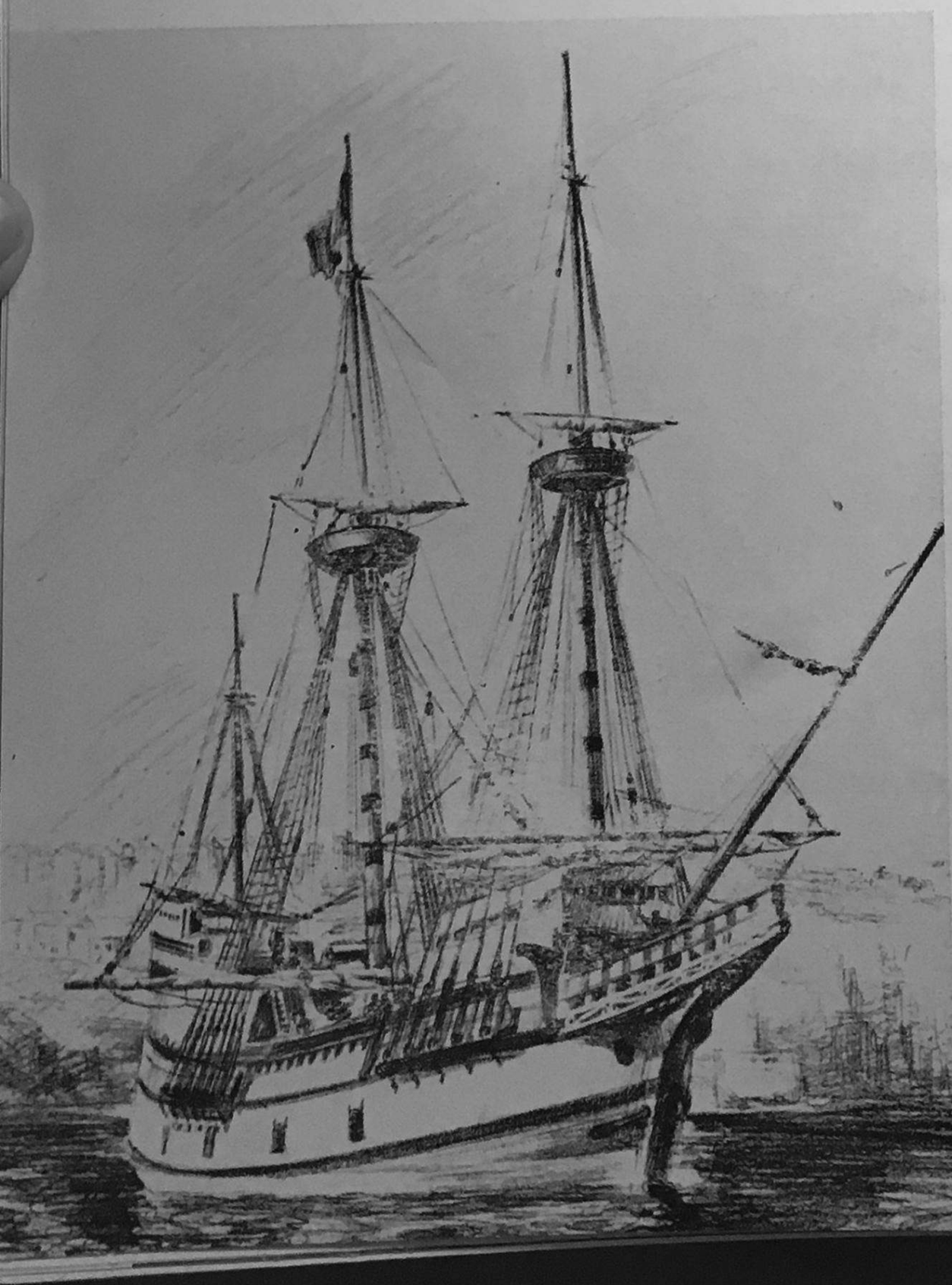
Despite the enormous range of operations in Stern's business, every facet of his work bears the stamp of a master. "I am more critical of my work than my clients," says Stern. The challenge of combining lithography with etching has been the ideal compromise between Stern's creative urge and mechanical abilities.

Stern's reputation is now so great that people from all parts of America call to see him at his San Mateo, California studio. There are usually two reasons for these visits: to discover how such beautiful work can be produced in such profusion, and to learn more about the man behind the drawing board. They meet a philosophical, kindly man, who attributes his profound contentment to faith in his fellow-men. Stern declares: "The good one does for others returns many-fold," and believes that "sincerity is reflected in an artist's work while shallowness produces a shallow art." ♦

Tall ships and tall buildings are recurring themes in Alec Stern's work. Sailing ships are a lifelong love, acquired in youth and retained in maturity. More recently the bustling city has also captured his heart. These etchings contrast the grace of the old-time sailing ship with modern urban symmetry.



Drying Sail



Mayflower II

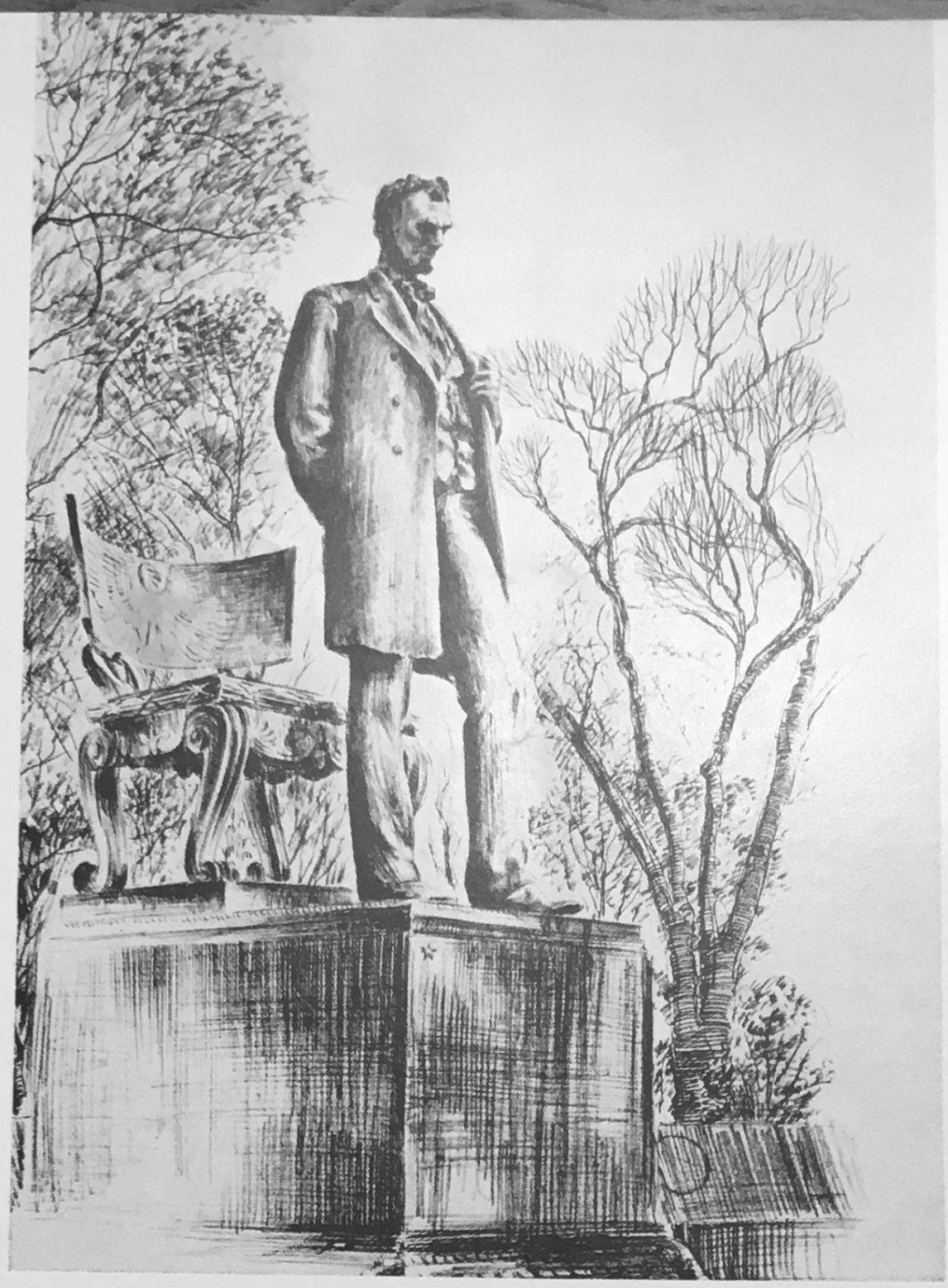
The Dashing Wave

Stately Manhattan

Graceful Spans

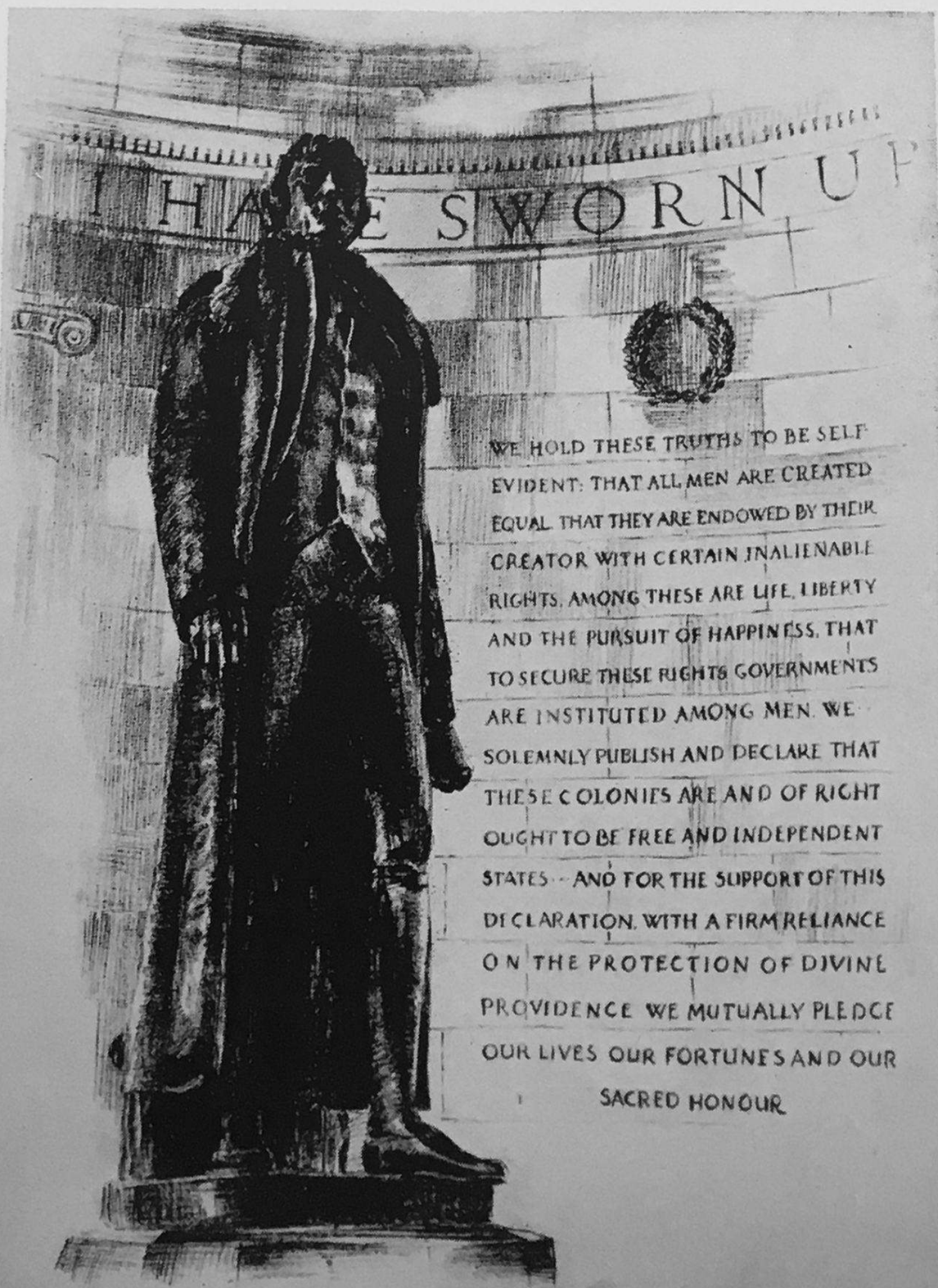
Trinity Church, New York City

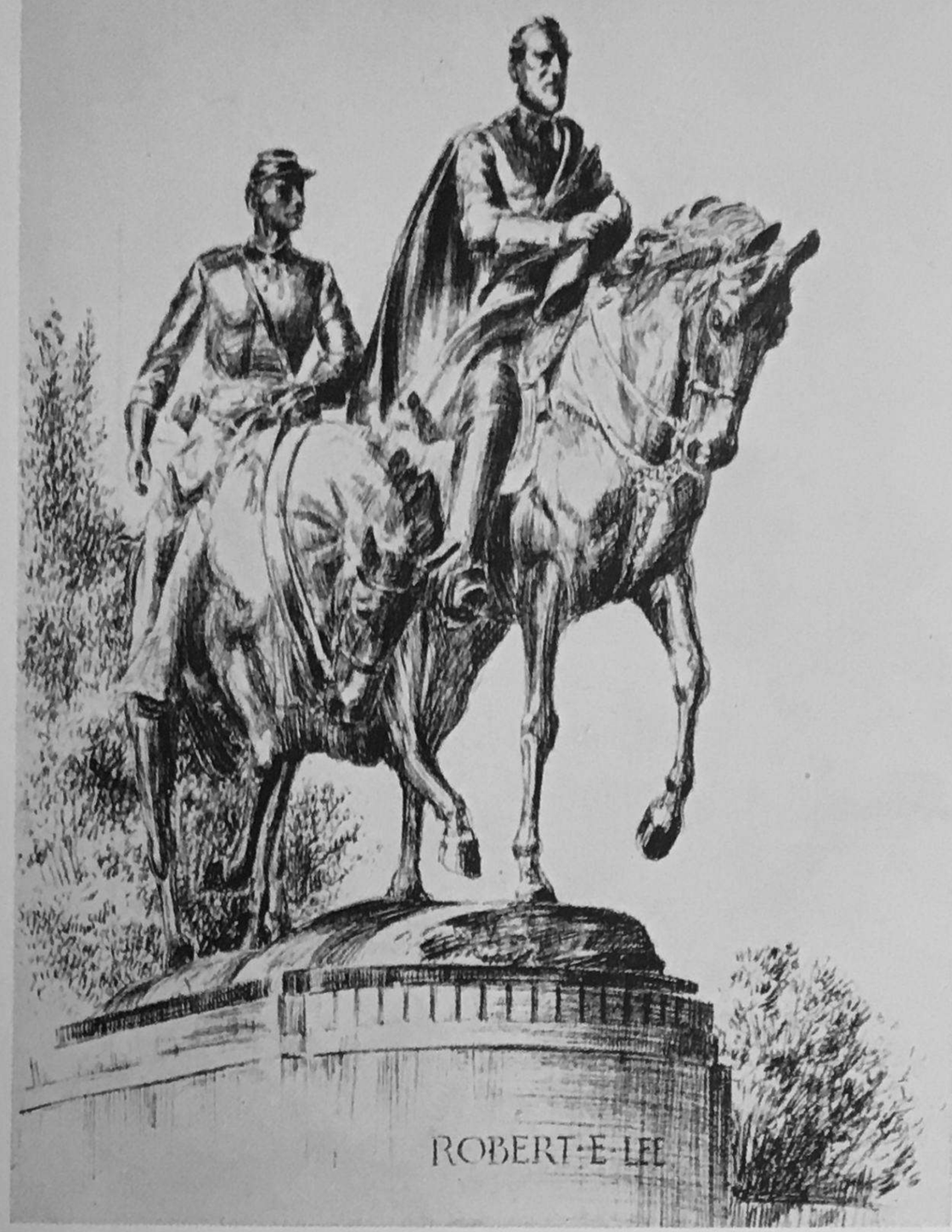
Downtown Manhattan Fantasy



The Ageless Lincoln

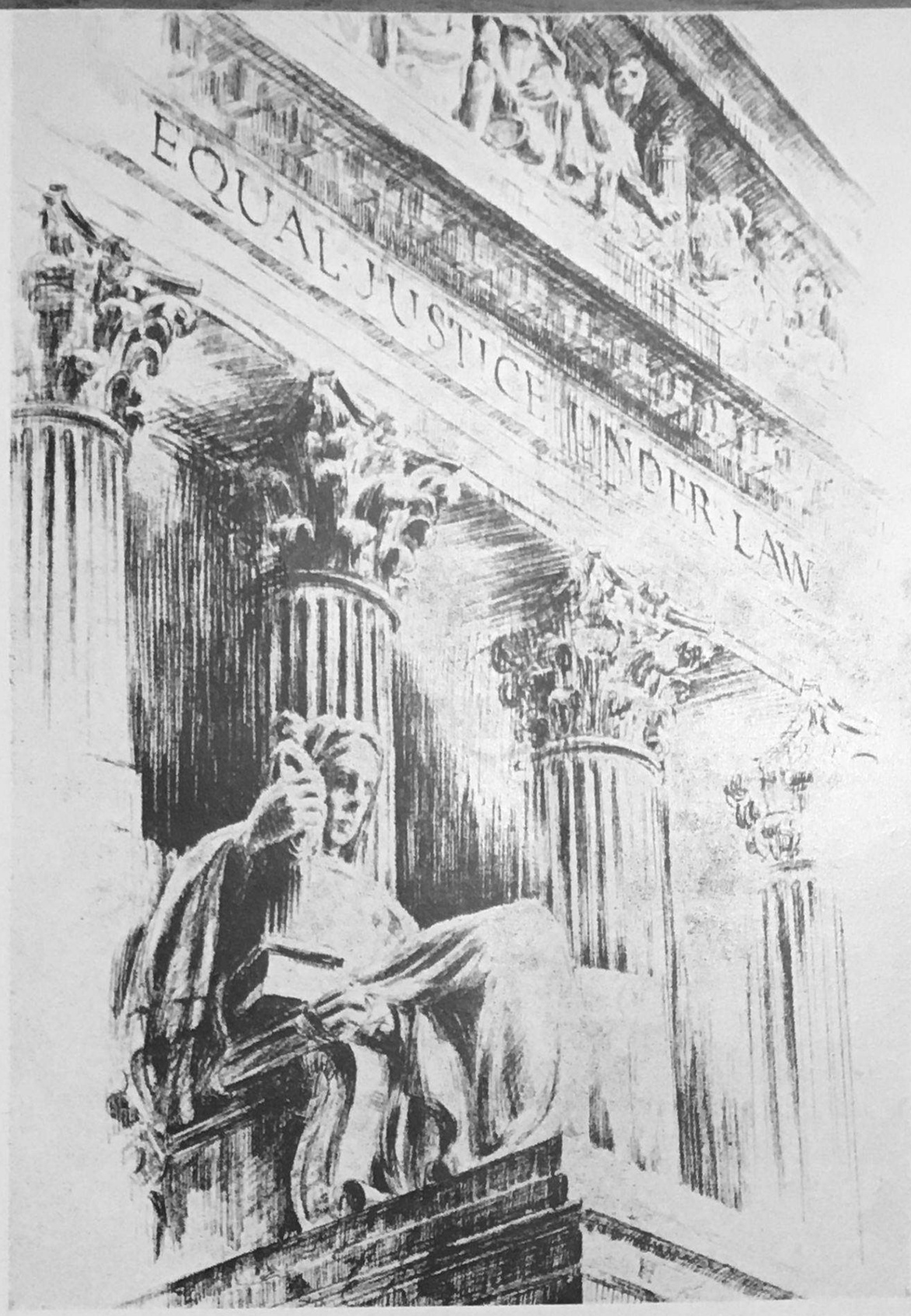
Thomas Jefferson





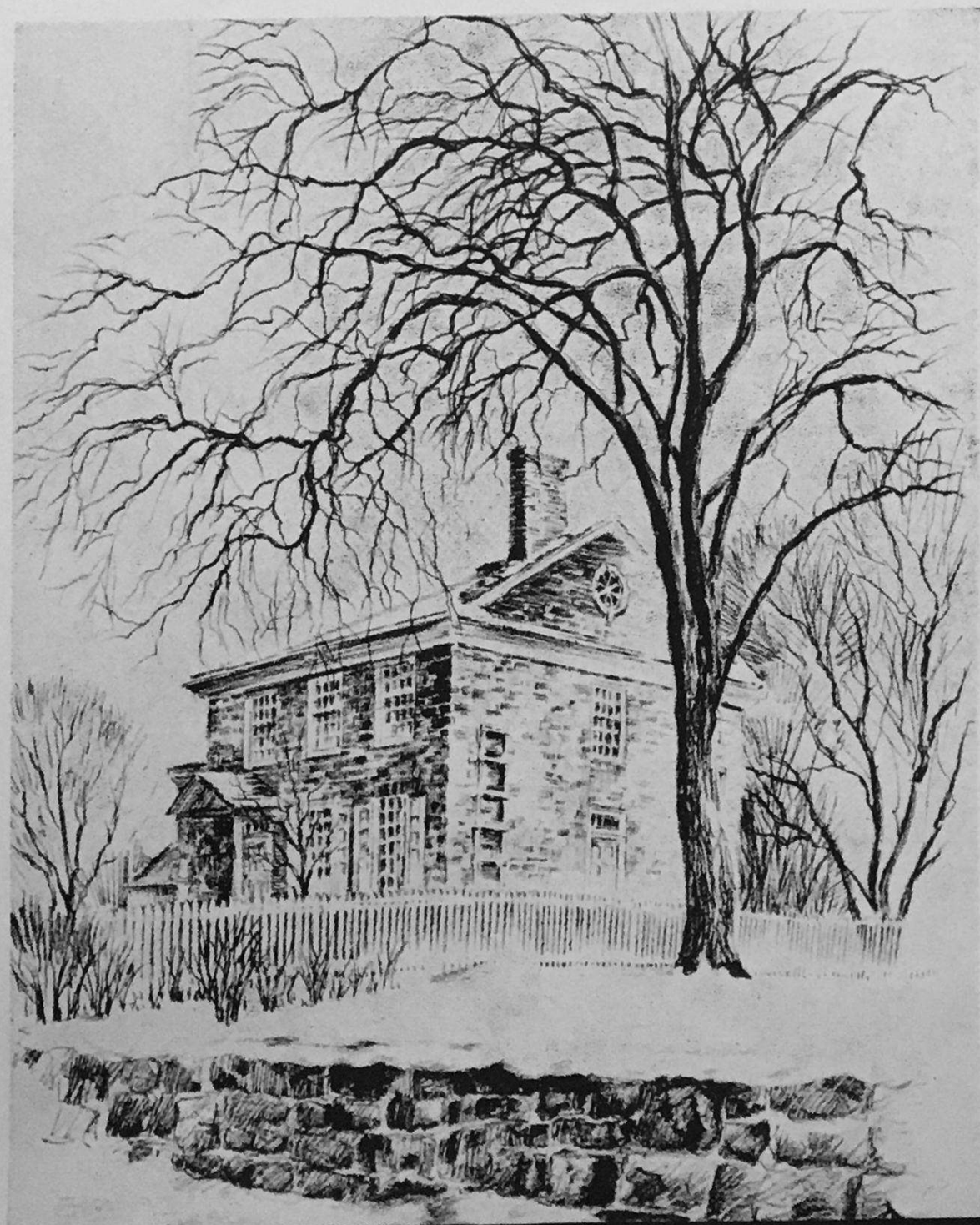
Robert E. Lee

Mount Rushmore National Memorial bears colossal busts of Washington, Jefferson, Lincoln, and Theodore Roosevelt.



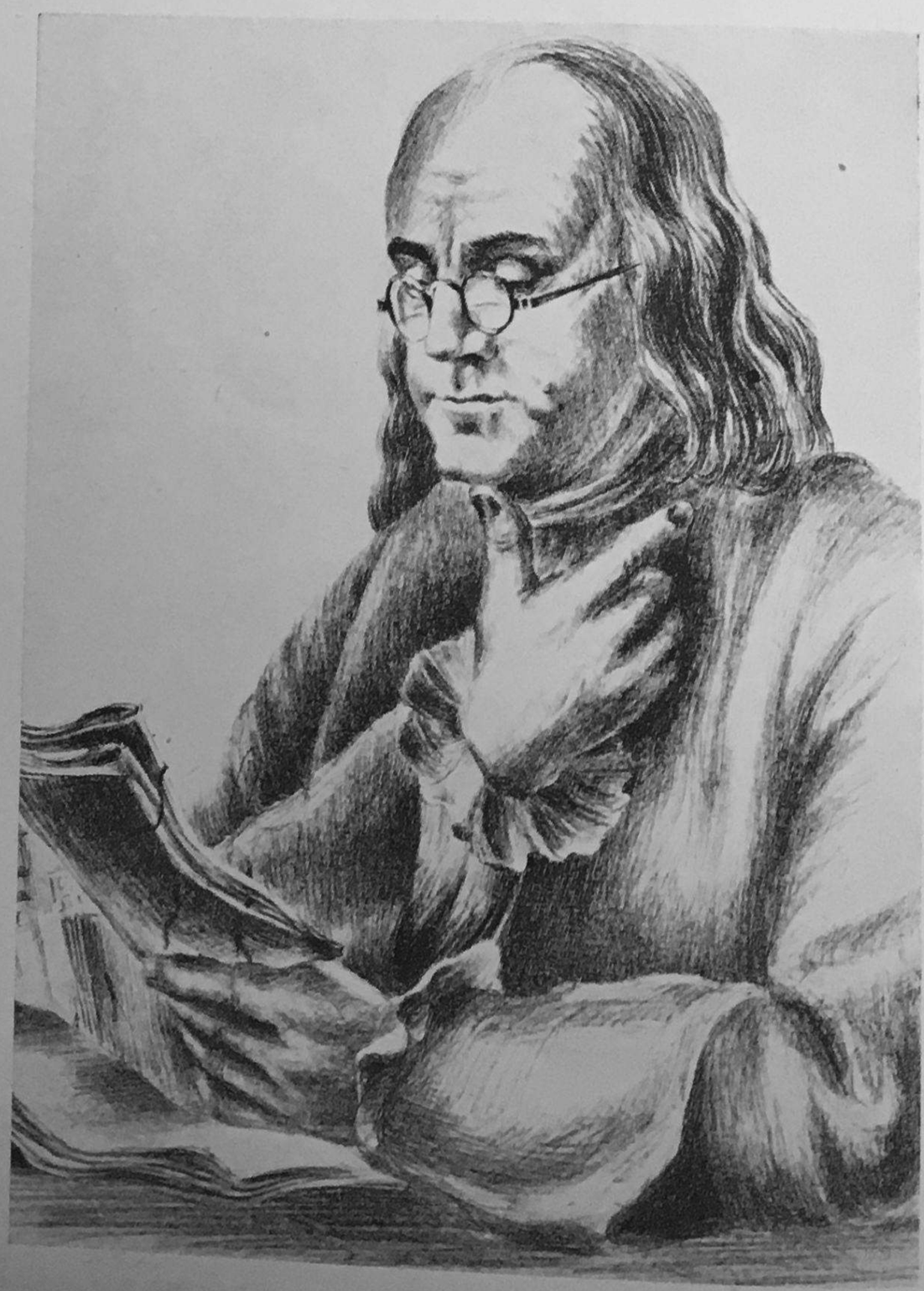
"Justice"— Supreme Court Building, Washington, D.C.

Washington's Headquarters



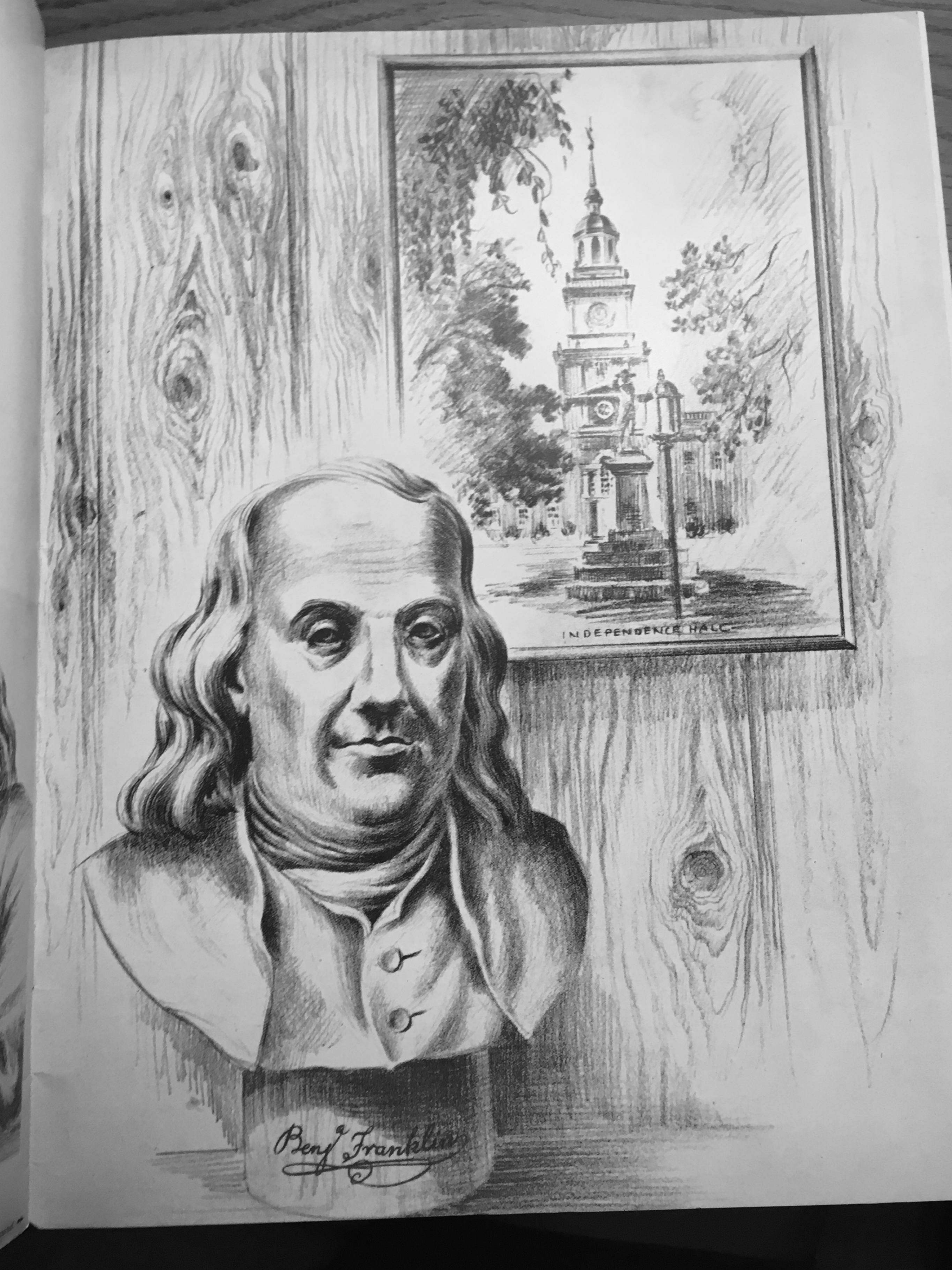
Benjamin Franklin's statue, Franklin Institute.

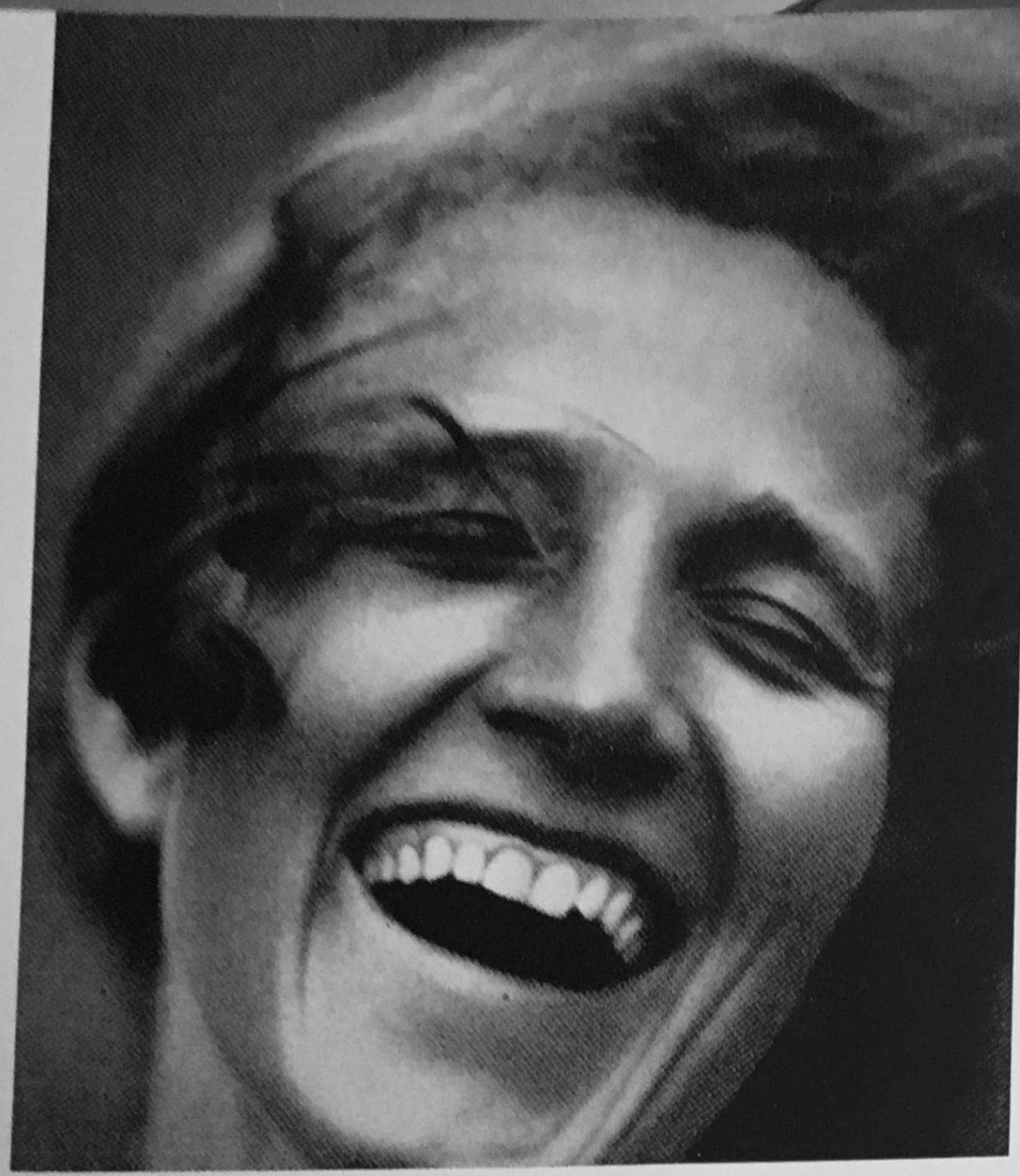
Portrait of Franklin by David Martin



Some of Alec Stern's most outstanding work deals with the lives and times of great figures of the United States of America. Among his many studies are these of Benjamin Franklin—statesman, inventor, journalist, printer, and one of the first truly great Americans—whose brilliant career is told in story and pictures elsewhere in this issue of WISDOM.

Famous Franklin bust with Philadelphia's Independence Hall in background. ➡


INDEPENDENCE HALL
Benj. Franklin



THE POWER O

by Sean O'Casey

LAUGHTER IS WINE for the soul—laughter soft, or loud and deep, tinged through with seriousness. Comedy and tragedy step through life together, arm in arm, all along, out along, down along lea. A laugh is the loud echo of a sigh; a sigh the faint echo of a laugh. A laugh is a great natural stimulator, a pushful entry into life; and once we can laugh, we can live. It is the hilarious declaration made by man that life is worth living. Man is always hopeful of, always pushing towards, better things; and to bring this about, a change must be made in the actual way of life; so laughter is brought in to mock at things as they are so that they may topple down, and make room for better things to come.

People are somewhat afraid of laughing. Many times, when laughter abounded, I have heard the warning remark, "Oh, give it a rest, or it'll end in a cry." It is odd how many seem to be curiously envious of laughter, never of grief. You can have more than your fill of grief, and nobody minds: They never grudge your *grief* to you. You are given the world to grieve in; laughter is more often confined to a corner. We are more afraid of laughter than we are of grief. The saying is all wrong—it should be "Grieve, and the world grieves with you; laugh, and you laugh alone."

Laughter tends to mock the pompous and the pretentious; all man's boastful gadding about, all his pretty pomps, his hoary customs, his wornout creeds, changing the glitter of them into the dullest hue of lead. The bigger the subject, the sharper the laugh. No one can escape it: not the grave judge in his robe and threatening wig; the parson and his saw; the general full of his sword and his medals; the palled prelate, tripping about, a blessing in one hand, a curse in the other; the politician carrying his magic wand of Wendy windy words; they all fear laughter, for the quiet laugh or the loud one upends them, strips them of pretense, and leaves them naked to enemy and friend.

Laughter is allowed when it laughs at the foibles of ordinary men, but frowned on and thought unseemly when it makes fun of superstitions, creeds, customs, and the blown-up importance of brief authority of those going in velvet and fine linen. The ban on laughter stretches back to the day when man wore skins and defended himself with the stone hammer. Many enemies have always surrounded laughter, have tried to banish it from life; and many have perished on the high gallows tree because they laughed at those who had been given power over them. Hell-fire tried to burn it, and the weeping for sins committed did all that was possible to drown it; but laughter came safely through the ordeals of fire and water; came smiling through. The people clung to laughter, and held it safe, holding both its sides, in their midst; out in the field, at home in the mud hovel, under the castle wall, at the very gateway of the Abbey.

Every chance of leisure the medieval peasant and worker snatched from his fearsome and fiery labor was spent in low revelry, banned by the Church, deprecated by the grandees; the hodden gray put on gay and colorful ribbons, and the hours went in making love, listening to and singing ditties mocking spiritual pastor and master, and whirling rapturously and riotously round the beribboned maypole. The bawl of the ballad came into the Abbey or Priory Church, and poured through the open windows of the Castle Hall, irritating and distracting the lord and his lady poring over the pictured book of hours. In story whispered from ear to ear, in song sung at peasant gatherings, they saw themselves as they were seen by their people, and they didn't like it; they weren't amused, for these things ate into their dignity, made them nearer to the common stature of common men, who learned the grand and distant were but a hand's span away from themselves.

Nothing could kill or stay laughter, or hold it fast in one place. It spread itself out all over the world, for, though men show their thoughts in many different manners, they all laugh the same way.

Nothing seems too high or low for the humorist; he is above honor, above faith, preserving sense in religion and sanity in life.

"People who laugh actually live longer than those who don't laugh.

Few persons realize that health actually varies according to the amount of laughter."

DR. JAMES J. WALSH

OF LAUGHTER

The minstrels thought (as we should think, too) that "The most completely lost of all days is that on which one hasn't laughed." So, if you get a chance in the hurry and complexity of life, laugh when the sun shines, when the rain falls, or even when the frost bites the skin or touches the heart with a chill.

Laughter has always been a puzzle to the thinker, a kind of a monkey-puzzle, a tree that doesn't look like a tree at all, but is as much a tree as any other one. Philosophers and sages have stopped up many and many a night, seeking an explanation, trying out a definition of comedy; but have gone to bed no wiser, and dead tired, while man kept on laughing, content to enjoy it, and never bothering his head as to what it was. Crowds of thinkers have set down big theories about laughter and comedy, among them the great Aristotle, Plato, Socrates, Jamblichus, and Kant; but though all of them were often blue in the face thinking it out, none of them got to the bottom of its mystery.

One American writer has connected laughter with Salvation; and maybe isn't far wrong. He says: "The Church will prosper not through diminishing its requirements upon its members, nor in punishing them too severely for their delinquencies, but in showing mercy and kindness. Mercy is a flexible connective between the ideal and the real; it is a proper manifestation of the comic spirit. God, too, has a sense of humor; is He not revealed unto us as full of compassion, long-suffering, and merciful?" That is Dudley Zuver's opinion, and a new and odd one it will be to many. Not to David Lyndsay, the Scottish poet of the sixteenth century, who saw God near breaking his sides laughing at a rogue of an old woman who got past the indignant St. Peter by the use of her ready and tricky tongue.

It is odd—significant, too—that in any litany whatsoever, Catholic or Protestant, Methodist or Baptist, there isn't a single petition for a sense of humor. There are petitions for everything, ideal conditions and real conditions, for everything except a sense of humor. If they petitioned for this, and got it, then the other petitions wouldn't be so many, for they would understand themselves more clearly, and cease to pester God to do things for them that they could do in an easier and better way for themselves. They would become more tolerant, would priest and parson, more understanding, more sociable, and, in many ways, more worthy of heaven and of earth. So let all who pray ask for what most of them need badly, a sense of humor to lighten their way through life, making it merrier for themselves and easier for others. Then there will be something in the carol's greeting—God rest you merry, gentlemen! Let nothing you dismay!

Where was laughter born, and when was it first heard? No one seems to know. We don't even know what it is. A baby knows how to cry before it learns to laugh. Its first smile is regarded as a miracle. So it is—the greatest and most valuable miracle born amongst men, though one thinker, Vico, says that "laughter is an attribute of second-rate minds." Let it be, then, for it is a lovely humor. It is so intensely human: however we may differ in color, in thought, in manners, in ideologies, we all laugh the same way; it is a golden chain binding us all together. The human mind will always be second-rate in the sense of still having to learn. To rise above humor is to rise above partiality, and no human being can do this; we are all partial, one way or another. We do not seek to be gods; we are content to be good men and good women; useful, neighborly, and fond of life, rounding it off with a big laugh and a little sleep.

The conscious humorist, said Vico, is a very low fellow. We're all very low fellows, for all of us, some time or another, are conscious humorists. And well we are, for our souls' sake, and for the sake of man's sanity. We couldn't live without comedy. Let us pray: Oh, Lord, give us a sense of humor with courage to manifest it forth, so that we may laugh to shame the pomps, the vanities, the sense of self-importance of the Big Fellows that the world sometimes sends among us, and who try to take our peace away. Amen. ♦

THE PSYCHOLOGY OF LEADERSHIP

by Harold W. Dodds

AMERICA HAS NEED of thousands of leaders who will never be elected President, or even a Governor of a State, or head of a professional society; but who, quietly and without ostentation, do nevertheless exert true leadership in their several walks of life. Anyone who by excellence of mind and character stands out from the crowd, whose views and ideals are respected by his neighbors, is a leader, and of such is the Kingdom of Heaven. Indeed, as another has said, leadership may be best when people barely know —or are hardly aware—that it exists.

A post of leadership has its natural glamors. Nor are they necessarily unworthy in moderation, although they can seduce the unwary to a loss of proper perspective towards themselves. Of course it is pleasant to be recognized as a leader and to be assigned a seat of honor at a banquet. It is fun to lead a parade while spectators applaud, which is probably the reason that the supply of drum majorettes always seems to equal the national demand for such attractive functionaries.

But the thrill of public acclaim is heady and dangerous wine. A too rapacious thirst for applause and yearning for power produce spurious leaders, the Hitlers, little and big, of this world. Wherever such exist, they are obstacles to the operation of popular government and a menace to our liberties. It is to a leadership grounded on more lofty qualities that you should aspire.

Let us now consider some of the qualities of which veritable not counterfeit, leadership is composed. I give them to you as pragmatic views based on some fortunate opportunities to observe how people of stalwart leadership behave.

A stupid man is at best a bogus leader. Therefore one essential for an authentic leader is intellectual awareness, supported by that broad and accurate knowledge which is an essential ingredient of wisdom. William Jennings Bryan wrote to Senator Glass when the latter was steering his famous Federal Reserve Bank Act through Congress "that any man with real goodness of heart can write a banking act." The enraged Senator correctly rejoined that this was "woolly nonsense." I am sure that it requires no argument to establish the proposition that a marriage of good will and high ideals to a fuzzy, undisciplined mind is bound to turn out to be an unhappy and often a tragic union.

Moreover, to clarity of thought must be added clarity of expression, which is why our colleges should emphasize a good command of the mother tongue more than they do. Many a man has been marked out for promotion to greater responsibilities because he could express what he knew more clearly than could his colleagues. Conversely, men of equal—or even greater—promise have been denied access to larger opportunities because they were not able to communicate with others easily and without ambiguity. Inability to express one's ideas always arouses the suspicion that one does not readily possess clear ideas, a suspicion which is usually well-founded.

A second qualification for leadership in a free society is human sympathy and understanding. It must be a real and enduring sympathy, not feigned for selfish reasons. To be unimpeachable, a leader must be constantly winning consent by deserving it. Even in military administration, leadership is "power *with* others rather than *over* others." A young officer is well advised always to be asking himself the old question, "What would I amount to if I didn't have the rank. Would troops follow me?" It is a question which many civilians could profitably ask themselves also. No one should forget, in the words of Ortega, that "the select man . . . is the man who demands more of himself than the rest."

A third component of leadership is courage; a moral boldness which readily assumes the burden and risks of decision, together with a courage to stand on what may be an unpopular and lonely spot, once the decision has been made. It is a type of courage *sometimes lacking in those whose physical courage is beyond reproach.* It is a special sort of quality; it entails the courage to say, when the chips are down, "I did it; I was responsible." If in the old slang phrase it is easier to let George do it, it is even easier to let George decide what should be done, and shift to others both the tensions and consequences of choice when grave issues are at stake.

But a mere willingness to accept responsibility for decision is not enough in itself, for there remains to be determined on what grounds and to what end shall the decision be made. Shall it be the solution which the leader knows in his heart to be right; or shall it be a slick solution, one which may satisfy the pressures of the moment but disregards ultimate good?

"When you hire people who are smarter than you are,

you prove you are smarter than they are."

R. H. GRANT

As you move through life, you will find that among the most critical choices you will have to make are those between considerations of short-term advantages and what you believe to be long-term good. The temptation to confuse proximate gains with final goals, is one that stalwart people capable of honest leadership will resist with all their strength. In politics, for example, honest leadership is not intimidated by a compelling eagerness to achieve high marks each week in the public opinion polls.

Thus we are led to the age-old conclusion that reason and intelligence alone produce but an incomplete human being. The more I observe people in pressure situations which strip them down until their true nature stands naked and revealed to their fellows, the more I comprehend and accept the old-fashioned stress on character. A college president, well known for his defense of intellectuals, summed it all up in a recent address when he said that, devoid of moral conviction, "reason and intelligence are helpless and capable only of arranging clever solutions" for the moment—solutions which are necessarily unsatisfactory.

It is obedience to moral conviction that gives a man an easy conscience, one of the most precious of human attributes. Failing an easy conscience, what may pass for courage degenerates into reckless desperation or debilitating passivity. To be at ease so that one is free to exercise his human resources to the utmost, one must first be at ease with his moral principles. Of course this is familiar doctrine. You may be inclined to dismiss it as a bromide, but it is the beginning of wisdom to understand that many bromides are true and many platitudes are well-founded.

In all generations man has found the basis of moral conviction, right and wrong, in his religion; that is, in his relationship to a Supreme Being in whom he finds self-realization and fulfillment. There is no avenue to truth which neglects the place of religion as the source of those human values which sustain and energize both individuals and society.

In an illuminating passage Alfred Whitehead wrote, "The life of man is founded on technology, science, art and religion. All four are inter-connected and issue from his total mentality." But how often do we defeat ourselves by banishing religion from our thoughts, and fall short of what the Almighty makes possible.

Having passed through it myself, I know how the new knowledge which a college education opens up may lead one to question one's faith in one's own religious awareness. Such questioning usually arises from the fact that one's recently acquired adult understanding of natural science and social science has come into conflict with childhood's immature religious concepts, concepts which may never be seriously challenged until a man gets to college. Then the shock may easily incline one to deny from "the top of his mind" what he knows "in the bottom of his heart" to be true. But a deeper understanding resolves the apparent conflict in a more mature realization of the unity and interdependence of knowledge; and a recognition that there is no final truth by which one can answer the eternal question; "Why I am here and where I am going hereafter," except in terms of religious belief.

More serious, however, for most of us than honest doubt is the day to day avoidance of the way of life that our religion prescribes. In the words (slightly paraphrased) of a prayer of confession frequently said, we are prone to seek strength where it is not to be found and rest where there is none. A common reason for this is that "God is saying some things to us which we do not wish to hear." Therefore we refuse to listen, in the manner of a deaf man who turns off his hearing aid when the conversation becomes boring or annoys him.

In the measure that you succeed, you will contribute to that quality of leadership which our country must have or perish. You must not fail in moral conviction as well, for without it these other gifts will wither on the vine. I can prescribe no better guide to self-realization and therefore happiness; as well as the fulfillment of what others have a right to expect of you, than the familiar and oft-quoted words of the Old Testament prophet:

> *He hath shewed thee, O Man, what is*
> *good; and what doth the Lord require*
> *of thee, but to do justly, and to love*
> *mercy and to walk humbly with thy God?*

Here is the basis of that moral conviction that will give you courage and strength throughout all your days, that will make you count for something and that will make you happy because that something will be good. ♦

UNDERSTANDING ALLERGY

by Harry Swartz

40 to 70 per cent of asthmatic children present a family history of allergy.

40 to 60 per cent of asthmatic adults also give such a history.

75 to 85 per cent of migraine patients have allergy in the family.

68 per cent of food allergics give a positive family history.

30 to 80 per cent of people with eczema give a family history of allergy.

25 to 55 per cent of people with hives are allergic in family background.

ALLERGY HAS FASCINATED PEOPLE since they first heard of it. Like no other medically-coined word, it has struck their imagination and now is commonly used in its vernacular sense. Comedians on radio, television, screen and stage use it in their quips, politicians in their stump speeches. In the mid-thirties Ogden Nash immortalized the word in verses he called "Allergy Met a Bear." Allergy is a common word whether used in jest or in earnest conversation.

What do people mean when they say, "He's allergic to work," "I'm allergic to my wife," "They're allergic to good music"? After a moment's thought it is easy to see that "allergy" is used to connote a reaction against something, due to a mysterious cause. It is this latter aspect of allergy, the mysterious, which has grasped people's imagination and held it. It is for this reason, too, that allergy has taken on an aspect of the humorous. The unknown, the mysterious, the not-understood is often given a funny twist so that it may lose its threat.

Yet for many millions of people in this country there is nothing at all comical about allergy. Their health, their very lives may be attacked by it. They may find it necessary to change their occupations or their places of residence, or both, because of it. They may be totally invalided by allergy or may find it so troublesome that life becomes a constant misery.

Even the people who suffer from allergy are, for the most part, unaware of the cause of their suffering. No greater fraction of afflicted humanity has been such avid victim of popular "cures." Recently when several drugs were heralded with great fanfare by newspapers throughout the country as cures for allergy, pharmacy shelves were swept bare in a few days.

It is not safe to believe that an individual will never suffer from allergy because he has escaped it to date. There is a growing conviction among allergists and persons involved in allergy research that the allergic reaction is common to all people and differs among them only in degree.

One out of every ten people in the United States suffers from some major form of allergy. One out of every two may at some time experience a minor form of allergy. And yet allergy is one of the newest fields of medicine. The turn of this century brought its inception. Much has been done in the development of knowledge in this field, much is being done daily, but there is still a great deal to be learned. Despite newspaper and magazine articles recurrent year after year, despite a handful of popular books, few of the basic concepts have reached the public, and the same misconceptions are constantly repeated.

We do not know how long allergy has afflicted mankind. Fossils record bone diseases from which man still suffers. Egyptian mummies reveal well-preserved lung tissue showing tuberculosis; muscular deformities indicate infantile paralysis; evidence of kidney and heart disease has been discovered in these petrified corpses. From the remains of past centuries we know something of the diseases attacking prehistoric and early civilized man, but no such record of allergy has been uncovered, primarily because allergy is a distortion of function rather than of the structure of the part involved.

There is an absence of reference to allergy in the writings of medical men and historians of ancient times who wrote profusely and often very acutely of a variety of diseases. Tuberculosis, heart disease, malaria, kidney trouble and many skin conditions were well known through the ages and were so commonly an accepted part of everyday living that they often passed into the writing of nonmedical men such as poets, playwrights and historians. But of allergy there is barely a whisper. The earliest reference

which we can ascribe to allergy is in a medical treatise dating back to 1565, or less than four hundred years ago.

Considering that millions in all parts of the world suffer from some allergy, and that allergy is most often brought on by the ordinary things of our environment such as plant pollen, foods, textiles—all of which were also common to the environment of early man—the absence of historical reference becomes a challenge. We also know today that a great percentage of allergy is inherited. Why, then, is history silent on such a prevalent condition?

There are at least two clearly defined theories of the absence of historical reference to allergy:

The first theory is that allergy is a new disease, a disease purely of civilization. Only when the world became so complex that suddenly some fundamental change began to take place within man, causing him to react in an unusual—*allergic*—manner to his environment, did allergy appear.

The view of allergy as a new disease is certainly superficial. Its adherents do not take into consideration the now established fact that a great proportion of allergy is hereditary. Did the structure of man change so radically that he suddenly began to inherit allergy? No other similar basic change has taken place. Furthermore, plant pollen, the proved cause of several forms of allergy, is older than civilization. Fossils have been found of trees and plants, and their pollen, that grew many million years ago.

That man suddenly assumes a new reaction to an old material is a scientifically invalid hypothesis. The statement that allergy is a new disease is therefore wrong, but it contains a suggestive truth: man, as society becomes more complex, comes in contact with an increasingly large number of substances with which he had no contact in a simpler society. Industrial raw materials circulate freely throughout the world and new synthetic materials of every description cause more and more new forms of allergy.

The second theory of history's silence on the subject of allergy is that, though man has suffered allergy from the beginning of time, the disease was not recognized as such, was probably not quite so prevalent, record keeping in medicine was primitive, and conference between medical men on their observations was practically impossible because of the distances of the early world.

The second theory is certainly more supportable than the first. Since allergy is for the most part hereditary, it has undoubtedly dogged man's history. Because it can skip about to practically every organ—the nose in hay fever, the lungs in asthma, the brain in migraine, the skin in eczema—medical men of the past simply did not know enough to look beyond the symptom and relate the underlying cause. The conception of disease processes, as late as the middle of the nineteenth century, was mystic, based on philosophy rather than science.

Allergy probably was less prevalent in early days than now for two reasons. First, hay fever and seasonal asthma, one cause of which is ragweed, are most frequent in the United States, a new location in man's history. Ragweed has never existed in Europe, the much older location of man's history. European hay fever and seasonal asthmas are caused by trees and grasses and their incidence is much less than the variety caused by ragweed. Second, as touched on in the first theory, the increasing artificiality of man's environment due to technology brings him increasingly in contact with foreign or newly created materials. As our knowledge increases and more and more of nature is conquered and utilized for the ease and comfort of man, the new materials involved often lead directly to increasing frequency of allergy.

Although both theories clarify to a degree the increase in allergy in our time, they do not explain the silence of medical and nonmedical historians on allergy of earlier times. Offending agents such as pollen, dust, foods and clothing have always been part of man's environment. Some chronic forms of allergy might easily have been overlooked, but when we think of the dramatic aspects of hay fever—the sudden, annual recurrence of sneezing, running nose and eyes, and their equally sudden cessation—it is difficult to understand how these have been overlooked.

Allergic symptoms are the result of the body's over-reaction to the world in its normal attempt to cope successfully with every phase of the environment. The result of this excessively vigorous reaction is an imbalance which expresses itself in unnecessary manifestations. The intensity of this basic constant process of coping with environment varies with the individual; there are those who manifest allergic symptoms in the presence of the common components of environment and others who may show symptoms only on prolonged contact with the unusual, rare or extraordinary elements of their surroundings.

Allergic symptoms may be initiated by any aspect of environment, material substances, nonmaterial forces or emotional distortions. These manifestations may localize in any tissue or organ of the body. Disease in general has an allergic component; indeed, many of the symptoms of specific disease are primarily ascribable to the allergic response of the organism to the disease. It might be added here that there is increasing evidence to prove that allergic symptoms arise to hormones. An individual may react in this manner to his own endocrine gland secretions such as the gonadal, pituitary, thyroid or adrenal glands. Zondek of the Ascheim-Zondek pregnancy test has shown rather conclusively that many women who experience menstrual symptoms such as tension headache and many others who experience untoward symptoms during the menopause are allergic to their own ovarian secretions.

The problem of treating the allergic individual, therefore, becomes one of treating the total individual. This is especially true of the more complex and cryptic allergies. Merely paying lip service to the idea leads nowhere. It is in instances of complex allergy that the allergist, unless he is aware of his patient as a total individual, loses himself in the search for some mysterious "*x*" factor. In investigating any particular case for responsible offending substances, the allergist must always be aware of the personality background and the immediate situation of his patient in regard to work, interpersonal relationships and strivings.

The best treatment that can be offered today is avoidance, hyposensitization, psychotherapy, surgery where advisable and symptomatic relief including drugs and mechanical aids. Such therapy combined with complete co-operation of the patient may produce excellent results in a large percentage of cases.

A much larger aspect of the problem of allergy today is that of prevention, or at least early recognition and treatment before incapacity results. In the past, the allergic has been treated when his symptoms made an appearance, as at one time was the case with many of the contagious diseases. When the public health aspect of contagious diseases was taken into account, many of them were almost wiped out, or at least placed under control. In this way, diphtheria has become a rare disease, typhoid practically does not exist and tuberculosis is much less rampant.

To apply similar measures to various aspects of allergic manifestations should be productive of similar good results. The problem would be considerably more complex because of the great number of possible causative factors and the multitude of manifestations. Such a program of control and prevention can be envisioned if centrally controlled, conscientiously carried out, and strictly adhered to in every detail. ♦

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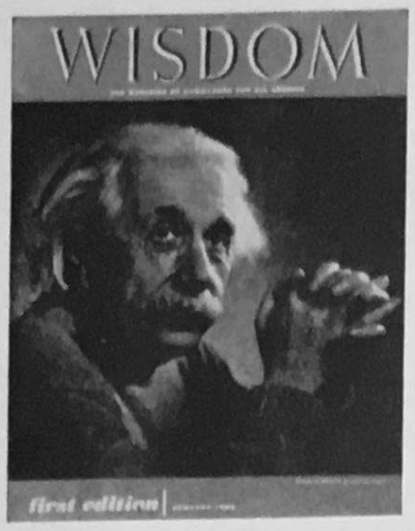

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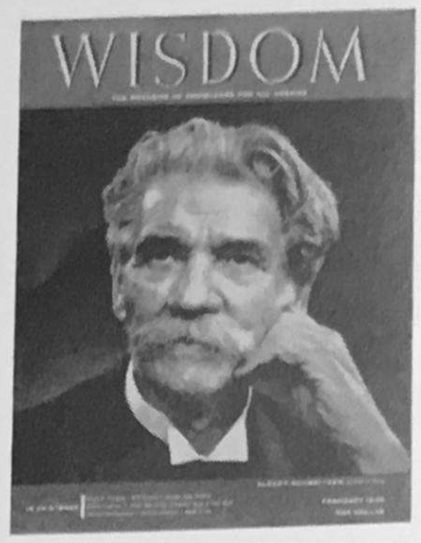

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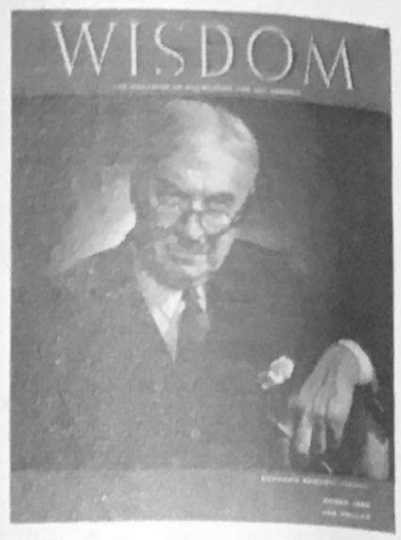

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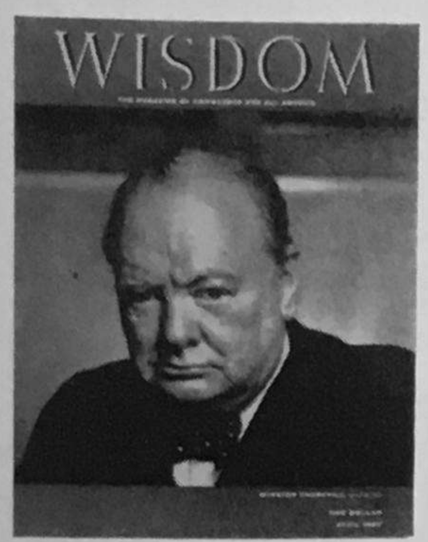

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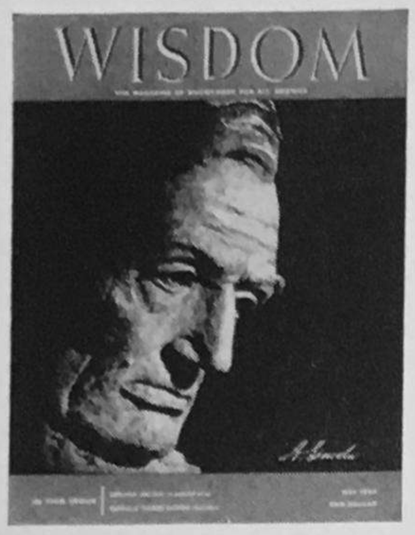

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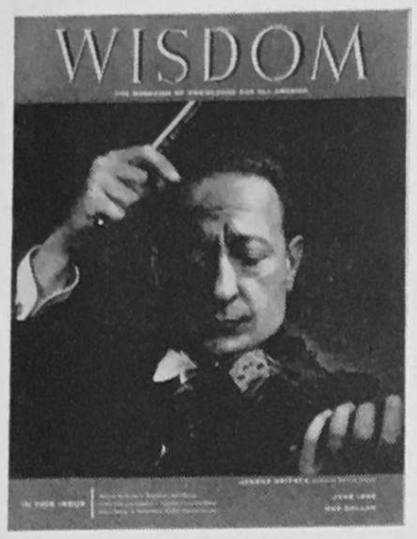

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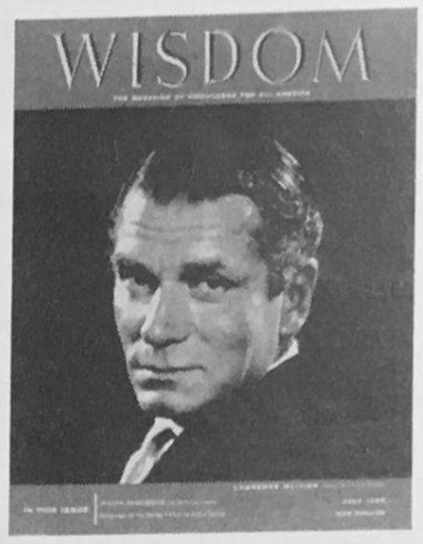

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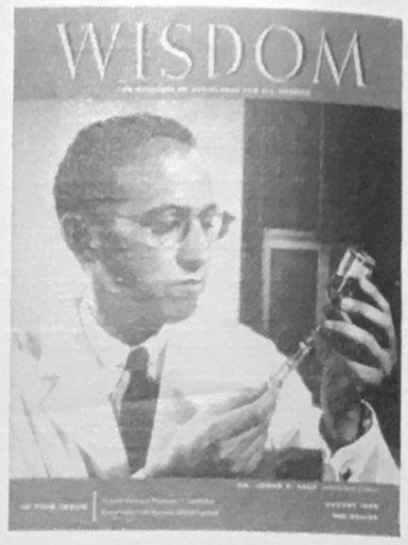

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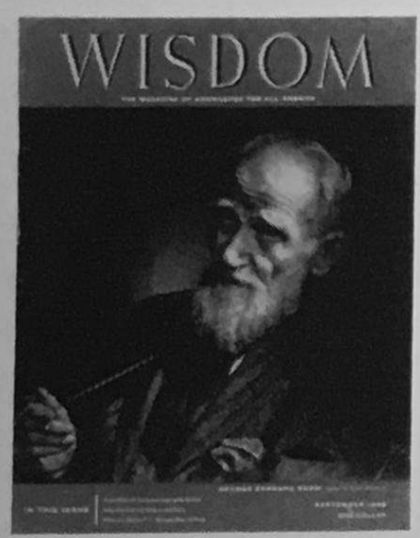

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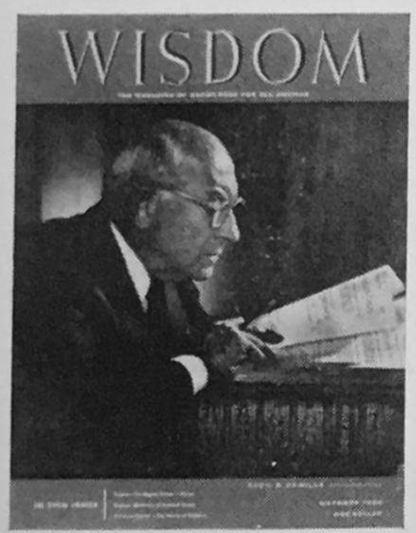

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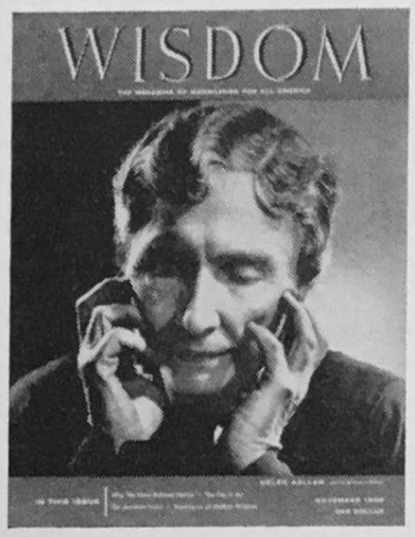

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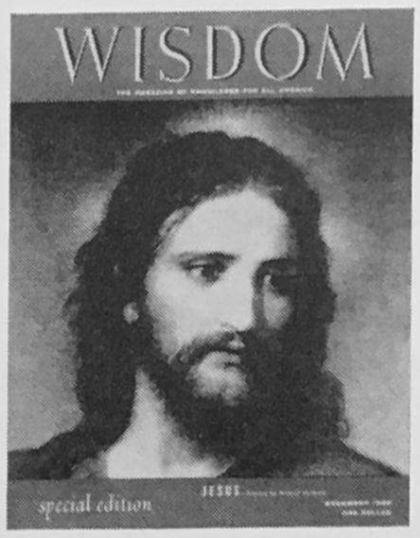

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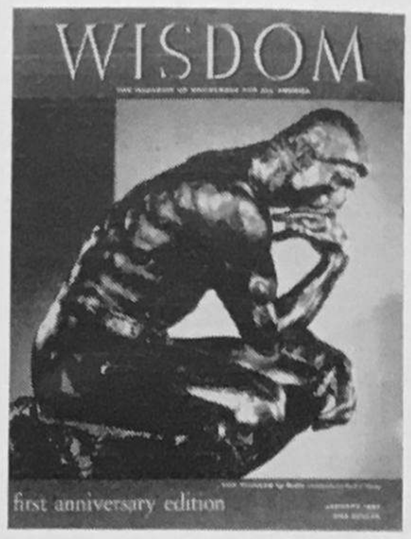

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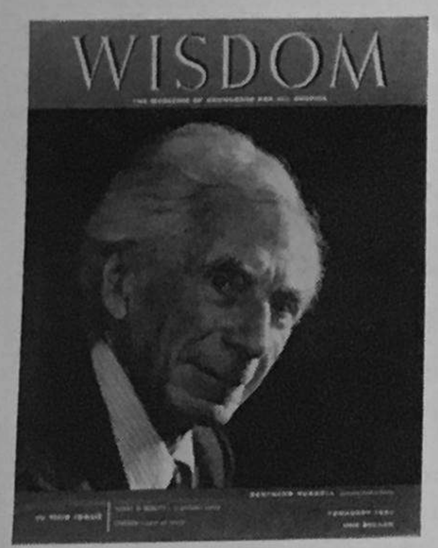

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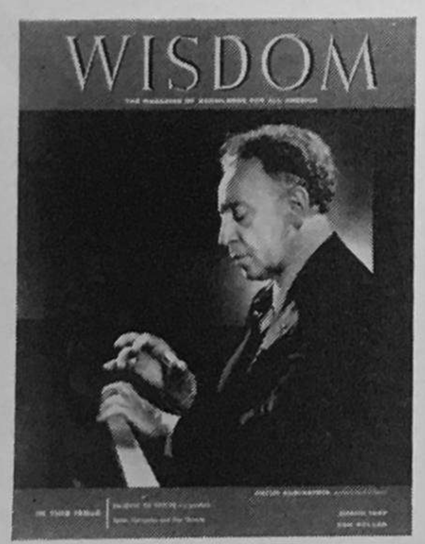

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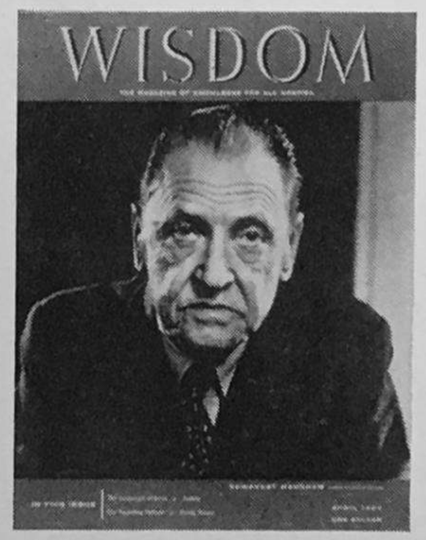

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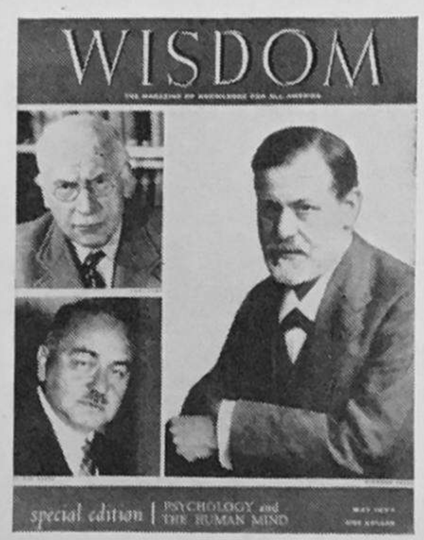

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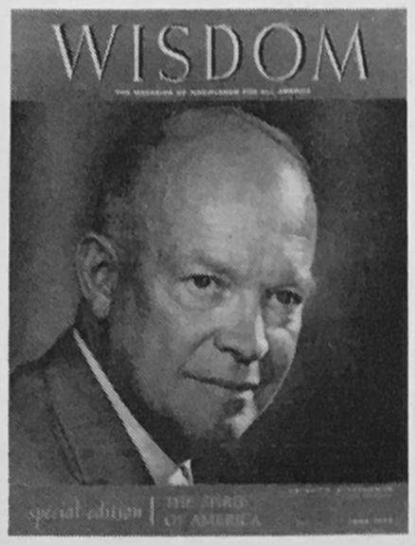

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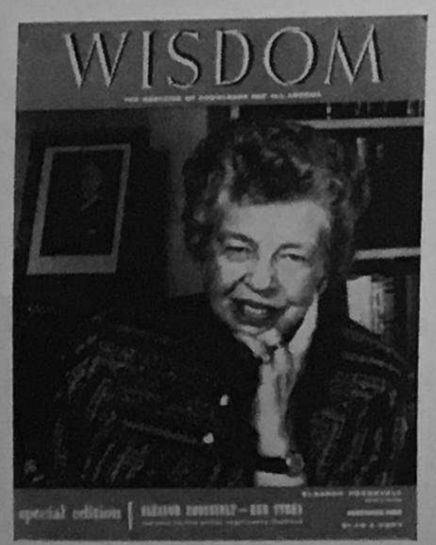

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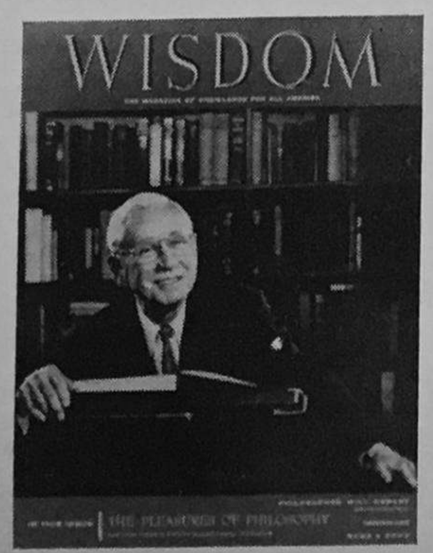

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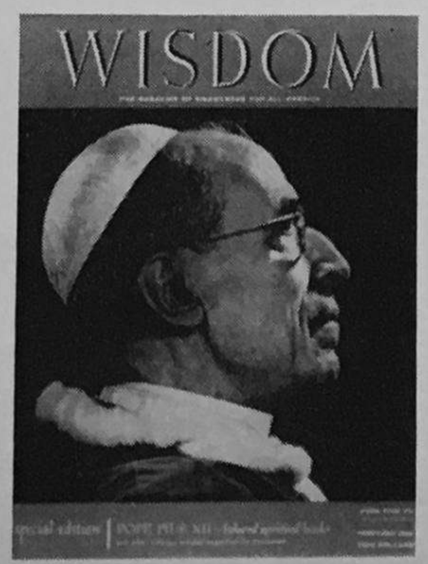

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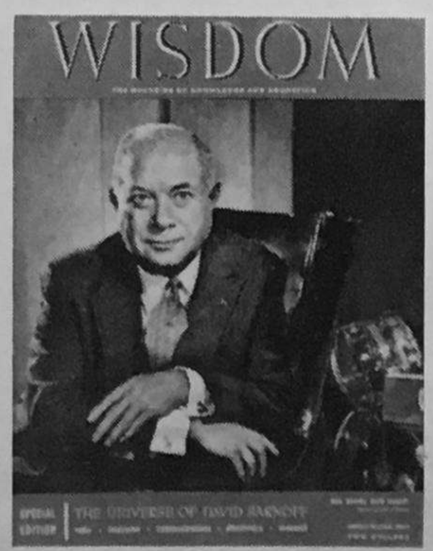

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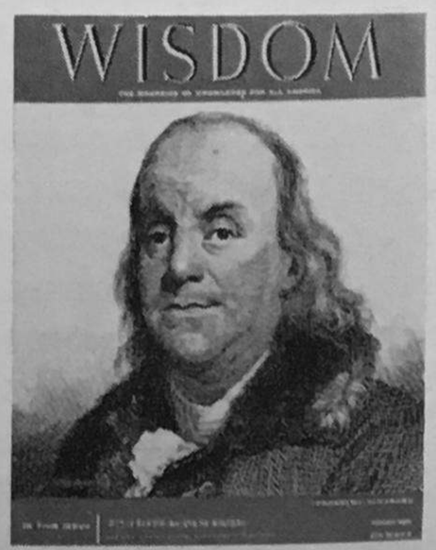

23 BENJAMIN FRANKLIN

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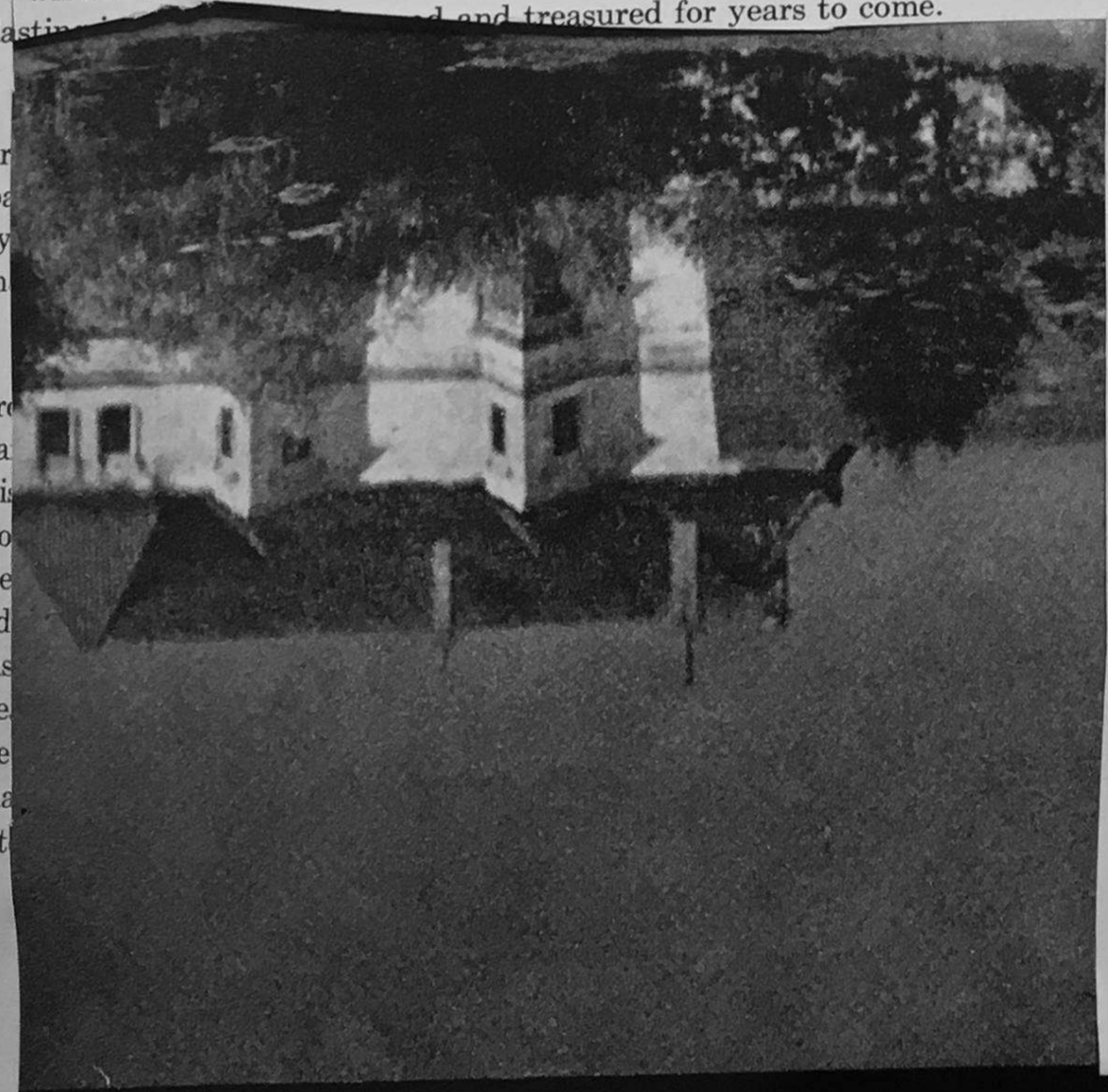

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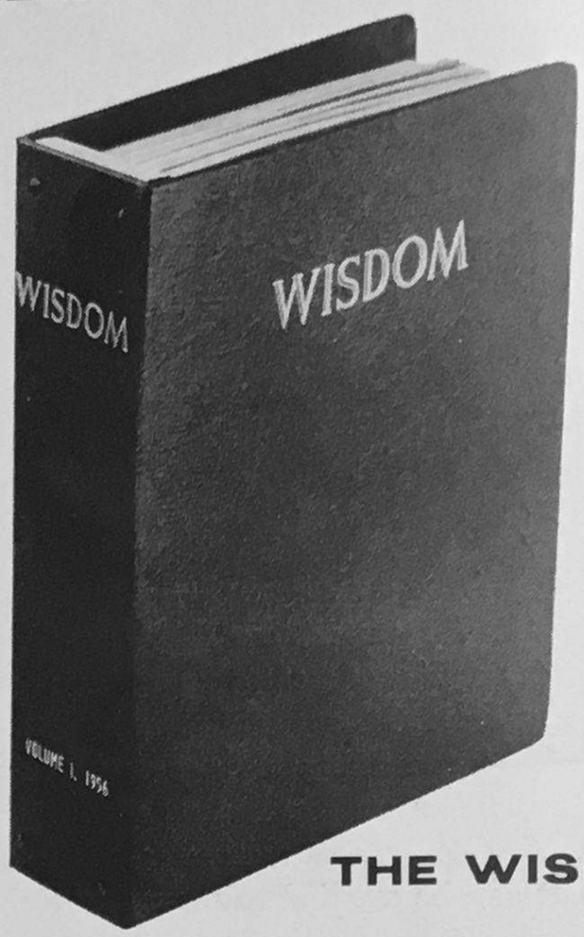

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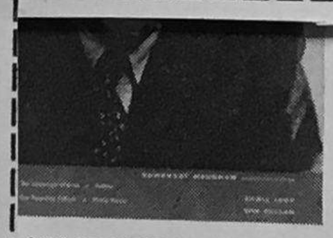
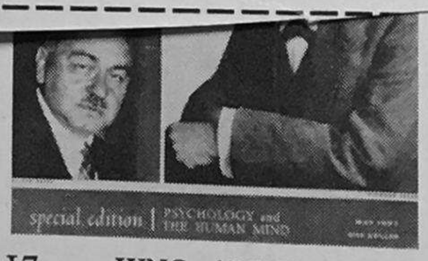
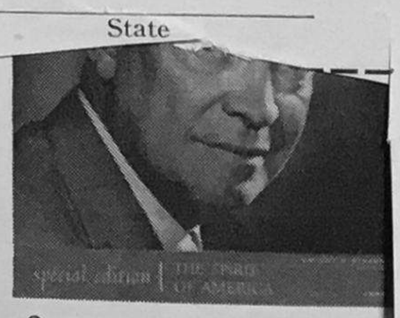
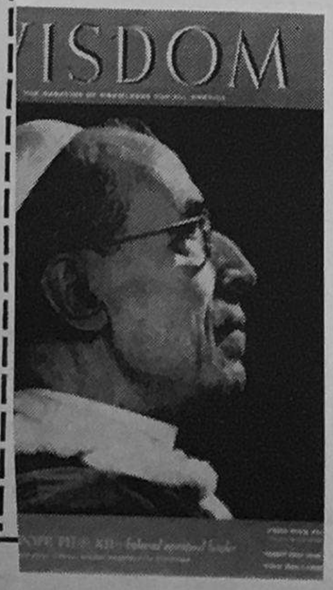

SOMERSET MAUGHAM



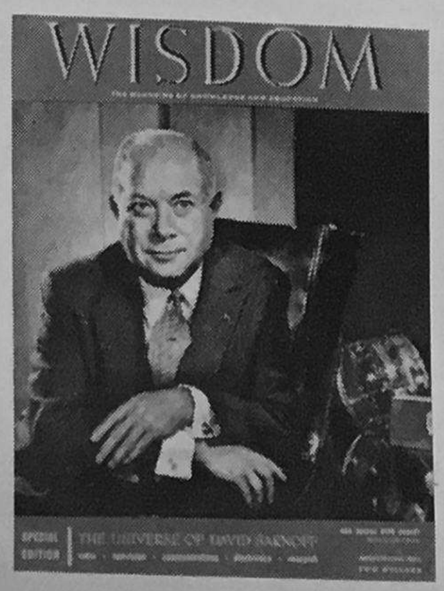
17 JUNG, ADLER, FREUD



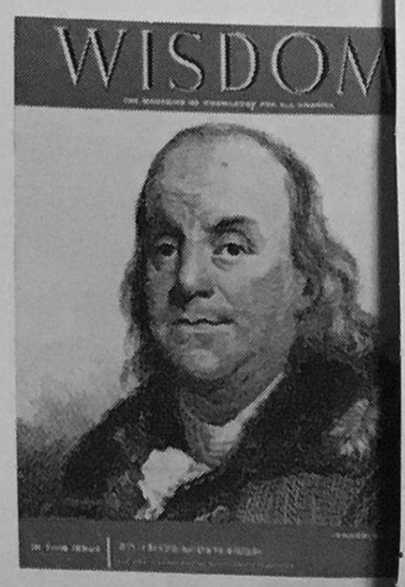
18 DWIGHT D. EISENHOW



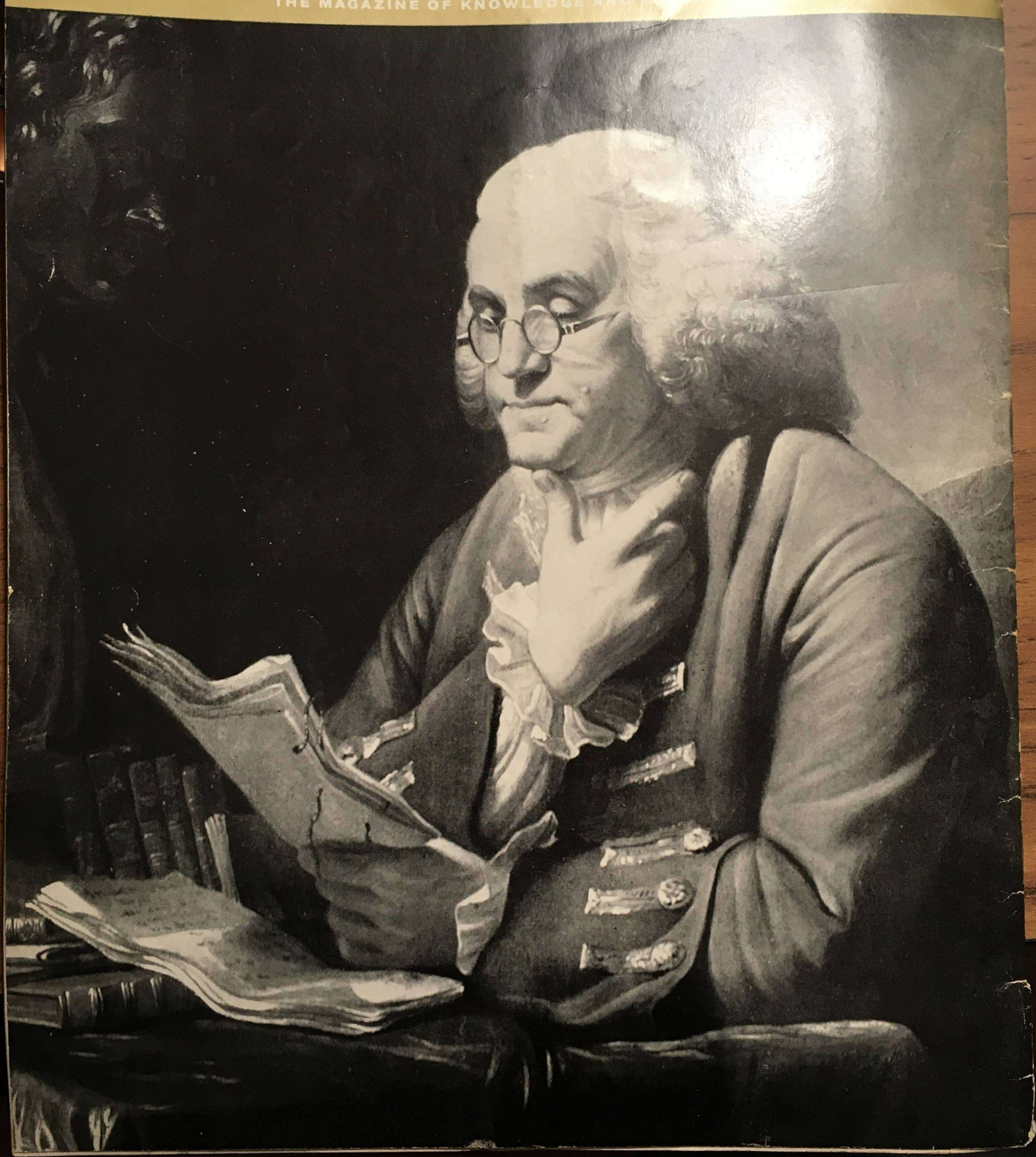
POPE PIUS XII



22 DAVID SARNOFF



23 BENJAMIN FRANK

WISDOM

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